PLAB Right Limited

PLAB - 2 MANUAL

PLAB RIGHT LIMITED

Thank for attending the PLAB 2 course at PLAB Right.

Group study is the key for success in OSCE examination. This manual is produced to guide your group study.

It is better if you stay in a small group of three. You need to take roles of examiner, actor and candidate in turn and solve the OSCE vignettes

Each Vignette has a mark sheet and a brief instruction to the actor. It is recommended that the candidate who will perform the task should not read the" instructions to the actor" or the mark sheet. Candidate should only read the vignettes.

You can take up to 40 seconds to read a question and 5 minutes to perform the task. The person who takes on the role of examiner can manage the time and let candidate know when 4.30 minutes are over.

Examiner should give a brief feedback at the end of 5 minutes. All members of the group should then look at the mark sheet and learn how to improve your own skills.

Please make notes in the provided space for future reference

I would like to take this opportunity to wish you very best of luck in the exam. Please remember that you should not hesitate to contact us at any time

PLAB Right Limited

Manikin stations

Breakdown of Marks for ALL Manikin Stations

1. Clinical Skills (Your ability examine or conduct procedure in a professional manner
2. Ability to appreciate the findings or successfully complete the procedure in 5 minutes
3. Your ability to describe the

No marks are awarded in PLAB exam for telling the examiner what you would have liked to do. Examiner can only award marks for the actual procedure.

*** For PLAB exam, Most times the question will clearly tell you to carry out the procedure or examination and all pre requisites have been completed. Read the question carefully. You do not have to do the steps written in italic font**

External genitalia and bimanual examination

*Introduces self, explains procedure to patient, position required, level of exposure and gains consent **
*Wash hands in a systematic manner using ayliffe technique**
*Ask for Chaperone. In PLAB Exam you can assume examiner as Chaperone **
*Ensure the patient has emptied her bladder, and ask for her LMP **
*Only expose as much of the patient as is needed **
Put on a pair of gloves
Inspect and comment on the external genitalia for any redness, swellings, scars, discharge, warts and vesicles. Ask patient to bear down to look for any prolapse and to cough to look for any incontinence.
Part the labia with your thumb and index finger and indicate you would check urethra for any discharge (to r/o gonorrhoea)
Lubricate fingers of examining hand
Insert index finger and then middle finger into the vagina
Vaginal examination (note findings) • On vagina (rugosities, swellings and tenderness), cervix (position, surface, tenderness), external os and fornices.
Bimanual examination (note findings) Place other hand on the abdominal wall and attempt to feel the uterus • Note its size and position • Palpate both adnexae • Note the size • Identify consistency whether firm or hard • Find out and not, surface, position, mobility and shape • Comment on posterior fornix for fullness and check for cervical mobility at the end before withdrawing fingers.
Remove and inspect fingers for signs of blood or mucus
Dispose of gloves properly
Cover patient, and thank her.
Document findings and report management plan

Do a per rectal examination and report your findings to the examiner

Rectal examination Male

Please perform a digital rectal examination on this patient

*Introduce self to patient and explain procedure, position and level of exposure required.**
*Gain consent to carry out the test**
*Ensure a chaperone is present, **
*Request patient to lie on left side with hips and knees flexed, or with knees bent up to chest. Ensure the patient is not exposed too much.**
*Wash hands using the ayliffe technique **
Wear non sterile gloves to both hands and lubricate index finger of examining hand
Inspect the anus and surrounding area for redness, swellings, vesicles, warts, and discharge. Part the buttock to look for anal fissures, fistulas and skin tags. Ask patient to bear down to look for any prolapse.
Insert finger into rectum
Explore the posterior and lateral walls of the rectum
Rotate your wrist and examine the prostate
Determine the consistency of prostate as either firm or hard
Note prostatic size, surface and lobes. (Throughout examination you would be looking at patient's face for tenderness, or ensuring he is comfortable)
Before withdrawing finger ask patient to sqeeze to check for anal spincter tone.
Inspect finger on withdrawal
Dispose of gloves correctly
Maintain dignity and cover patient, and thank him.
Tell the examiner your findings
State any tests you may now like to complete
Who would you refer to?

PLAB Right Limited

1. Inspection:
   - skintags- ischaemic bowel disease
   - Haemorroids
   - Fistula
   - Bleeding / discharge – Ca, IBD, STD

2. Examination:
   - Prepare- glove and lubricant(expiry date)
   - Posterior wall
   - Lateral walls
   - Anterior wall (Prostate)
     - Medial sulcus
     - Lobes
       - Consistency – firm/ hard/soft
       - Size – equal on both sides /enlarged
       - Shape
       - Surface – smooth/ irregular

Prostate	
Normal	The median sulcus is felt between the lateral lobes which are equal in size, firm in consistency and have smooth surface.
Unilateral enlargement	The median sulcus is felt between the lat lobes of which one side is larger than the other which are firm in consistency with smooth surface.
Bilateral enlargement	The median sulcus is felt between the lat lobes but is very deep. Both lat lobes seem to be enlarged which are firm in consistency with smooth surface? Benign prostatic hypertrophy.
Unilateral irregular	The median sulcus is felt between the lat lobes of which one lobe is normal in size, shape and consistency and other lobe has irregular surface(hilly and craggy nodule) - ? carcinoma
Bilateral irregular	The median sulcus cannot be appreciated as both the lat lobes are irregular in size and shape and consistency may be hard/firm- ? Carcinoma.

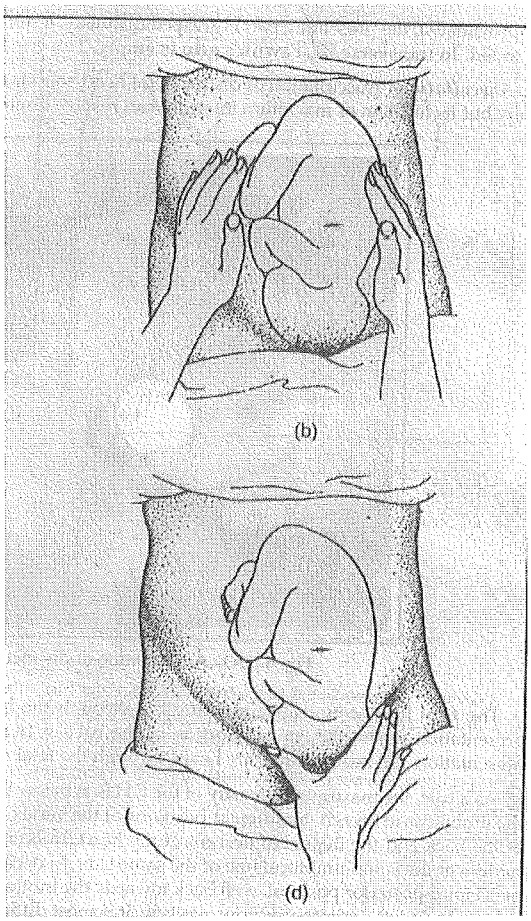
Examine 36 yr old pregnant lady who is 32 week pregnant

Obstetric Palpation

Please examine this pregnant patient and report your findings

*Introduce self to the patient ,explain procedure, level of exposure and gain consent.**
*Indicate the need for a chaperone**
*Wash hands using the ayliffe technique**
*Ensure patient has emptied her bladder, and ask for her LMP.**
Inspect the abdomen, commenting on protuberance, umbilicus being evertered, looking for striae. Look at flanks for any fullness (evident in transverse lie of fetus)
Perform a fundal height measurement from symphysis pubis to fundus of the uterus in cm
Palpate the uterus using both hands
Identify foetal lie
Identify foetal presentation
Identify foetal position
Identify level of foetal engagement
Listen to and count foetal heart rate remember to indicate you would check mothers pulse at the same time
Maintain patient dignity throughout (exposing abdomen only)
Ensure to minimise patients discomfort throughout (not using undue pressure, keeping hands on abdomen as much as possible during the examination)
Thank the patient and ask her to get dressed
Report your findings to the examiner and comment that examination would be complete by measuring mother's blood pressure, weight and urine for any proteins.

Inspection:	umbilicus (everted) Striae Fullness of flanks
Palpation:	fundal height (+/- 2cm)
➢ Fundal grip	breech: broad, soft and irregular mass Head: smooth, hard and globular mass
➢ Lateral grip:	Back: smooth, curved, resistant, continuous Limbs: irregular, knobby
➢ Pelvic grip:	presenting part, ballotable



PLAB Right Limited

Cervical Screen

Please can you take a cervical smear on this patient.

*Introduces self, explains procedure to patient, position required, level of exposure and gains consent**
*Indicate need for a chaperone, when requesting patient to undress from waist below.**
*Check menstrual history with patient.**
Prepare your equipments. Write the name of the patient on the glass slide (if not used state you would dispose of it in sharps bin)
Wash hands using the ayliffe technique and don gloves
Lubricate the speculum with warm water.
Introduce the speculum at 45 degrees to the normal position pointing towards the small of the back
After initial insertion rotate gently through 45 degrees into the position for opening the instrument
Open the speculum gently and locate the cervix
Take a note of the appearance of the cervix (bleeding or discharge, shape and appearance of the external os), and lock your speculum by turning the screw.
Insert the endocervical brush or the long arm of the Ayre's spatula into the external os and rotate through 360 degrees three times to collect cells
Apply the cells immediately to the slide or place brush into the container
Unlock the speculum and gently withdraw the speculum slightly before closing to avoid trapping the cervix **Always remove the speculum under direct vision**
Seal slide and place into transport box. Indicate you would place speculum in a tray to go for sterilisation.
Remove gloves and wash hands
Cover patient, thank her and report your findings

Inspection → Swelling

Ulcers/ vesicles/ warts/ scars
Discharge / bleeding
Bear down - ? prolapsed
Cough - ? incontinence

Examination:

Prepare gloves/ lubricant
Vagina:

- Rugosities
- Tenderness
- Swelling

Cervix:

- Size/ shape / Surface/ tenderness
- Position – anterior, central, posterior
- Mobility

Bimanual examination:

Uterus:

- Anteverted / retroverted
- Size

Adnexa:

- Size/ shape/ surface/ consistency

Normal (Anteverted)	Can feel the fundus of the uterus, normal in size.
Retroverted	Not able to feel the fundus of uterus. Cannot comment on size
Enlarged (Anteverted)	Can feel the fundus of uterus but is significantly enlarged in size. ? Fibriod, pregnant belly.
Adnexal mass	Can feel the adnexa which is enlarged in size, firm in consistency and smooth surface. ? ovarian pathology.

PLAB Right Limited

Breast Examination

Please examine this patients breast and report your findings.

*Introduces self, explains procedure to patient and gains consent**
*Indicates need to wash hands in a systematic manner **
*Ensure a chaperone is present **
*Ask the patient to undress to the waist and sit with arm by her side **
Inspect the breasts for size, symmetry, shape, skin colour and superficial veins
Inspect the nipples for everted, flat, inverted (note if recent or longstanding)
Inspect the nipples and areola for cracking or eczema, bleeding or discharge, abnormal reddening or thickening
Inspect the breast whilst patient raises arms above her head and comment on any nipple retraction, puckering or tethering, any swellings visible in the axilla, and any redness or eczema on the under-surface of the breast.
Then ask her to place her hands on her hips and apply pressure which can help exaggerate abnormalities.
Then ask patient to lean forwards and examine breast from the side to observe for any obvious swellings.
Lie the patient down with one pillow behind her head arms by her side or with one arm behind head, and check for the temperature of both breasts with the back of your hand.
Palpate the breast using the palmar surface of three middle fingers.
Use a rotary motion to gently press the breast tissue against the chest wall and be looking at the patient's face for any obvious tenderness.
Examine each breast systematically covering the whole cone of the breast tissue, following concentric, zigzag or radial paths.
Ask patient to rest arms above head and examine the axillary tail of Spence for any lymphnodes.
Ask patient to gently compress the nipple attempting to express any discharge
Note colour of discharge and send for cytology and microscopy
Palpate axilla glands, anterior group, posterior group, medial group, lateral group, apical group and supraclavicular and infraclavicular group.
Ask the patient to get dressed and thank patient
Report you findings to the examiner and comment that examination would be complete by examining the spine, lung, liver and the lymphnodes. Describing your findings: Site (Quadrant), Size (mm/ cm), Shape, Consistency, Edges (smooth or irregular), Surface (indentation), Discharge, Sign of emptying on pressure, Tenderness, Redness, Stability (mobile or fixed), anatomical plane or origin of a lump (skin, subcutaneous tissue, muscle or bone) and surroundings (lymph nodes or other lumps) **Award of marks:** **How you have examined in a professional manner and have given an accurate and complete description.** This is a difficult station and needs lot of practice.

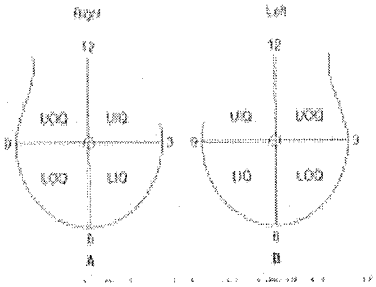
Inspection:

Pt position: sitting/ leaning forward/ hands above head/ hands over hips.
Breast: symmetry/ contour.
Nipple:

- Equal on both sides/ level
- Inverted/ retracted (uni/ bilateral)
- Redness/ discharge/ cracking
- Puckering/ tethering – peau d'orange(inflamed tumour under skin)

Palpation:

Four quadrants:



Index, middle and ring finger only for most sensitive examination.

Lump:

- Size/ shape/ consistency/ margin
- Mobility (attached to underlying skin/ tissue)

Important:

- Axillary tail of Spence
- Axillary lymph nodes

	Benign	Malignant
Surface	Smooth	Variable
Consistency	Firm/ rubbery	Hard
Margin	Smooth/ regular	Irregular
Mobility	Mobile / not fixed	Fixed to skin or chest wall
Skin	No puckering / tethering	Puckering/ tethering
Nipple	No retraction	Retraction
Discharge	May be green/ yellow	Bloody discharge (unilateral/bilateral)

PLAB Right Limited

Testicular examination

Please examine the testicles of this 28 year old and report your findings

*Introduces self, explains procedure to patient and gains consent**
*Indicates need to wash hands in a systematic manner using the ayliffe technique**
*Ensure a chaperone is present**
*Examine the patient lying down and standing **
Wear non sterile gloves ensure your hands are warm
Expose as little of the patient as possible
Inspect the scrotal skin
Left testis lies lower than the right but both should be visible
Using gentle pressure examine both testicles using the thumb and first two fingers
Note the size and consistency of the testicles
Palpate the epididymis
Roll with the fingers and thumbs the vas deferens
Thank the patient and ask him to get dressed
Tell the examiner your findings Describing your findings: Position (side, anterior, posterior) Size (mm/ cm), Shape, Consistency, Edges (smooth or irregular), Discharge, Sign of emptying on pressure, Tenderness, Redness, Stability (mobile or fixed), anatomical plane or origin of a lump (skin, subcutaneous tissue, testis and epidiymis) and surroundings (lymph nodes or other lumps)
If you found a lump who would you refer to
What tests might you do now

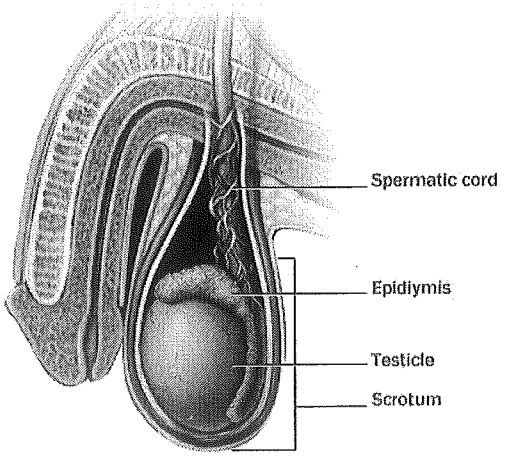
Inspection: swelling/ redness/ lumps/ scars/ underneath for any infection(fungal)/ rugosity

Palpation: Temperature
Thumb, index and middle finger

Testis
- Size/ consistency

Lump
- location/ size/ consistency/

Epididymis/ spermatic cord



PLAB Right Limited

Arterial Blood Gas sampling

Please take a blood gas sample from this patient

*Introduces self, explains procedure to patient and gains consent**
*Wash hands in a systematic manner using the ayliffe technique**
Selects appropriate equipment.
Performs Allen test
Palpates radial artery
Flexes wrist and places on sterile field
Clean area well with steret allow to dry for 30 seconds
Don gloves
Prepare syringe (attach needle without contamination and expel all heparin)
Locate artery (without contamination) and insert need at 45 degree angle
Slowly advances needle until blood spontaneously starts to fill pulsator
Cover puncture site immediately with wad of gauze as needle is removed and hold
Remove needle with one hand using sharps box
Hold gauze tightly 10 pounds of pressure for 5 minutes (**don't ask patient to hold you must do it**)
Remove air from syringe then cap and push plunger on syringe to seal
Label and place in ice immediately
Do not move gauze until 5 minutes is up if bleeding has not stopped hold for longer
Place fresh gauze on wound and tape leave for at least 20 minutes
Thank patient and clean up mess

PLAB Right Limited

Suture Hand

This patient has cut his hand on a sharp edge.

Tetanus has been given.

Wound has been anaesthetised.

You are gowned and gloved

Clean the wound and give two sutures

Do not shake the examiners hand

Do not waste time

*Introduces self and explains procedure to patient and gains consent**
Clean wound area aseptically using clean hand dirty hand technique
Understand the need and how to assess nerve/tendon damage
Remove dead or doubtful tissue
Apply two sutures appropriately without contamination
Ensure haemostasis is achieved
Dispose of needle **immediately** into sharps box
Apply dressing
Dispose off other disposable equipment
Thanks patient Difficult Station needs lot of practice Marks are awarded for your ability to put 2 sutures (tight enough to achieve wound closure) in 5 minutes. This is a sterile procedure. You must dispose sharps in to sharps box. Use yellow bin to dispose clinical waste.

PLAB Right Limited

Venepuncture

Please collect a sample of this patients (Michael Jones) blood and label it correctly

*Washes Hands using Ayliffe technique**
*Introduce self to patient**
*Explains procedure**
*Gains consent**
Gathers correct equipment appropriately
*Watch, rings etc removed sleeves above elbow**
Identifies suitable vein
Applies tourniquet ensuring not too tight
Cleans skin and allows to dry for 30 seconds
Attach needle to holder without contamination
Insert needle at 30 degree angle
Attach sample tube appropriately
Remove sample tube from holder
Cover puncture site with gauze
Place needle into sharp box immediately
Ensure patient has stopped bleeding
Dispose of all equipment correctly
Label sample and send to lab
Thank patient

PLEASE REFER TO THE COLOUR CODED BLOOD COLLECTION TUBE GUIDE AT THE MANIKIN ROOM FOR SELECTING APPROPRIATE TUBES FOR THE TEST

PLAB Right Limited

Intravenous Cannulation

Please insert an intravenous cannula into this patient

*Introduces self, explains procedure to patient and gains consent**
*Indicates need to wash hands in a systematic manner (Not Demonstrated)**.
Selects an appropriate sized cannula. Pink or Green
Collect equipment (steret, gauze, non sterile gloves, dressing, 10 ml syringe and 5mls saline flush)
Applies tourniquet, check radial pulse is retained and palpates vein
Cleans area with steret in circular motion for 30 seconds allow 30 seconds to dry
Wear gloves
Gently squeezes cannula out of packet and checks white cap is loose
Insert cannula at 30 degree angle a short way into the vein until flash back seen by cap
Insert the cannula 2mm further only
Change grip on the cannula so that you are holding the wings with one hand and the needle with the other
Pull back on the needle a small amount (2-3mm) until a flash of blood flows along the plastic cannula
Hold the hand with the needle in completely still and slowly push the cannula over the needle into the vein (never pull the needle out)
Keep pushing until the cannula is level with the skin (do not leave a gap as infection can enter)
Let go of everything now and place gauze under the cannula
Remove tourniquet
Remove the white cap and keep hold of it
Remove the needle and place immediately into sharps box (the mannequin will bleed just let it)
Screw the cap onto the cannula to stop bleeding
Remove gauze and clean blood from around the area
Remove dressing from packet and apply over cannula
Write the date and time of insertion on the dressing if label is provided
Draw up 5mls of sterile saline for injection
Lift the coloured cap on the cannula and flush with the saline observe to ensure cannula is patent and patient is comfortable
Dispose of waste correctly remove gloves and wash hands

REFER TO THE POSTER IN THE MANIKIN FOR DIFFERENT TYPES OF CANNULA SIZE FOR ADULT: 16

PLAB Right Limited

Examination of the ear and tympanic membrane

Please examine this patient's ear and tympanic membrane and report your findings.

*Introduces self, explains procedure to patient and gains consent**
*Washes hands using the ayliffe technique**
Selects appropriate equipment and ensures it is in working order
Inspect the pinner and adjacent tissues
Position the patient with head flexed laterally away from you
Hold the pinner firmly and gently pull upwards and backwards to straighten the canal using the hand not holding the otoscope
Hold the otoscope in the same hand as the ear being examined
The speculum should be as wide as possible to fit into the ear canal
Hold the otoscope like a pen horizontally with your curled fingers resting on the patients cheek
Identify the normal structures of the ear
Note findings • Colour, shape • Perforation • Scars • Ossicles • Light reflex
Gently remove otoscope
Remove speculum and place for cleaning
Report you findings to the examiner
Would you refer further?

PLAB Right Limited

Blood Pressure Measurement

This patient has been complaining of dizziness please record a lying and standing blood pressure.

Introduces self, washes hands with gel and explains test, checks patient is rested
Record sitting blood pressure first.
Removes clothing from the upper arm.
Ensures arm is supported on pillow and at the level of the heart.
Selects appropriate size cuff.
Places sphyg. level with the heart and no more than three feet away from the student.
Applies cuff so the centre of the bladder is over brachial artery on the inner aspect of the upper arm.
Palpates radial or brachial artery, inflating bladder to the point where pulse is no longer palpable, then deflates bladder, remembers estimated systolic pressure.
Re-inflates cuff to 20-30 mmHg above palpated systolic pressure, place stethoscope over brachial artery and slowly deflates at a rate of 2-3mmHg/second.
States result, confidently, correctly and interprets result.
Asks patient to stand whilst you support them.
Record standing blood pressure in same manor but using the estimated systolic reading you obtained earlier.
States result, confidently, correctly and interprets result.
Thank the patient and ensure their clothing is pulled back into place and they are comfortable.

PLAB Right Limited

Male Urethral Catheterisation

Please catheterise this patient assume you are wearing sterile gloves

*Introduces self, explains procedure to patient and gains consent.**
Checks catheterisation trolley (prepared) and all appropriate equipment is present.
Check cleaning solution is in the galli pot (just saline as the patient should be socially clean already)
Prepares sterile field. (sterile towel with hole in it) and places it in position.
Retracts foreskin with piece of sterile gauze and cleans glans penis without contamination, using clean hand dirty hand technique with at least three pieces of cotton wool
Indicates need to change gloves
Checks content of lignocaine gel (lubricating gel) and expiry date.
Administers gel and indicates need to gently pinch end of glans penis, to prevent gel escaping from the urethra, for three to five minutes.
Empty sterile receiver and place below penis to stand the end of the catheter in
Inserts urethral catheter by only touching the outside plastic bag
Continue inserting until urine drains (in male mannequin abut 20cm)
Once urine drains insert the catheter another 3cm to ensure the balloon is in the bladder.
Checks content of sterile water ampoule and expiry date.
Draw into syringe exactly up to the 10ml mark
Inflates balloon with recommended amount of sterile water, observing the patient for verbal and non verbal signs of pain.
Attaches catheter bag without contamination.
Place the foreskin back over the glans penis
Remove sterile field and clean up all equipment.
Thank patient and ensure they are comfortable.

PLAB Right Limited

Eye Examination

Please complete an eye examination on this patient and report your findings.

*Introduces self, explains procedure to patient and gains consent**
*Wash hands using ayliffe technique**
Selects appropriate equipment.
Ask patient to fix their vision on a distant object
Dim the lights
Hold the opthalmoscope close to your eye with your index finger on the lens dial
Approach the patient from a shallow angle of 15-20 degrees
Approach on the same level as the equator of the patients eye
Note and comment on red reflex
Note and comment on anterior structures of the eye
Focus on retina
Identify optic disc
Follow blood vessles into four quadrents
Seek to identify macula and fovea
Thanks the patient
Report your findings to the examiner

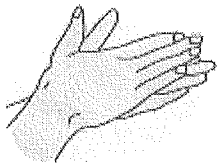
PLAB Right Limited

Wound Dressing
*Washes Hands using Ayliffe technique**
*Introduce self to patient**
*Explains procedure**
*Gains consent**
Wear Apron
Check all equipment is present/Gathers equipment
Wash hands again using Ayliffe technique
Watch, rings etc removed sleeves above elbow
Opens sterile equipment without contamination
Applies sterile gloves without contamination
Removes old dressing using yellow bag
Cleans wound with clean hand dirty hand technique
Asepsis maintained throughout procedure
Apply new dressing with clean hand
Dispose of all equipment correctly
Thank patient

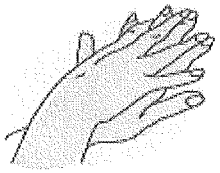
PLAB Right Limited

Ayliffe Handwashing Technique

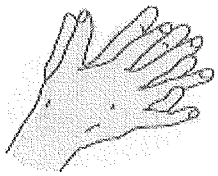
To correctly and effectively wash your hand completes each step with 5 repetitions.
Use 5mls soap or 3mls of alcohol gel. Always use soap if hands are visibly soiled or after 5 uses of alcohol gel.



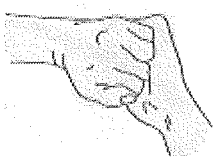
Palm to Palm



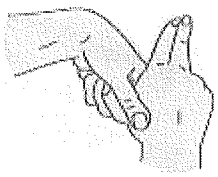
Right palm over
Back of left, fingers
Interlaced, and then
Vice versa.



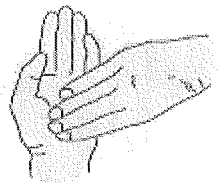
Palm to palm,
fingers interlaced



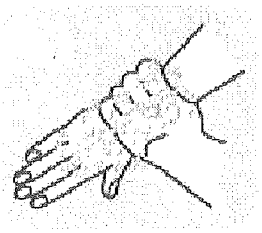
Back of fingers
Opposing palms
With fingers
Interlaced



Rotational rubbing
of thumbs enclosed
by palm.



Rotational rubbing
backwards and forwards
Of fingertips in palm of
opposite hand.

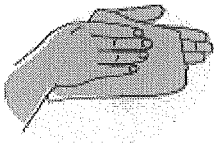


Rotational rubbing of
Wrists with opposite
Palm.

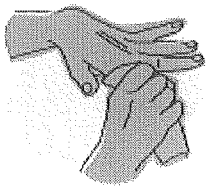
PLAB Right Limited

Drying technique

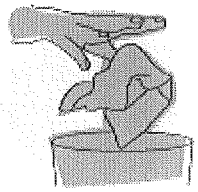
Wipe back of each hand thoroughly with Towel, working down From the wrist to Fingertips.



Rub palm to palm



Twist the towel once around each finger and thumb making sure the Whole finger from Base to tip is dry.



Place towel in yellow clinical waste bin.

PLAB Right Limited

Adult BLS In- hospital

Safety
Victim bystanders and you

Check for a response
Gently shake the shoulder and ask LOUDLY" Are you alright

Shout for Local Help: "Help, Help"

Check for cervical spine injury: Feel back of the neck for any injuries.

look in the mouth Open the airway, and then
Look Listen & Feel for breathing for no more than 10 sec.
Feel for carotid pulse for no more than 10 sec
You can do this simultaneously

Call for help by calling 4444/ Crash team.
Get a defibrillator (Look around and say I will look for a defib)

30 Chest Compressions
Rate 100 -120/min

2 Rescue breaths
30 compressions

Apply the electrodes of the defibrillator as soon as they are available

PLAB Right Limited

Paediatric BLS

Safety
Victim bystanders and you

Check for a response
Gently stimulate and ask LOUDLY "Are you alright" Don't Shake the child, you may tap on the floor

Shout for Local Help: "Help help"

Check for cervical spine injury: Feel back of the neck for any injuries.

look in the mouth Open the airway, and then Look Listen & Feel for breathing for no more than 10 sec.

5 initial rescue breaths

Check for circulation Feel for carotid pulse for no more than 10 sec

15 Chest Compressions with one hand, keep fingers away from the ribs. Rate 100-120/min

2 Rescue breaths
15 compressions

After 1 min call for help*

Continue with CPR, That is breathing and cardiac compressions.

EXAMINATION OF CRANIAL NERVES I-VII

"Good morning Mr/Mrs Briggs. My name is Dr. XXXX, one of the junior doctors in the unit. I have been asked to examine the nerves of your face. Will that be all right? I will try and be gentle, please feel free to stop me if you feel any discomfort"

OLFACTORY NERVE CN I

Ask the patient "Has your sense of smell changed recently ?. " You can also mention taste as well - sensory component of Cranial Nerve VII Facial Nerve .

OPTIC NERVE CN II

Visual Acuity

Formally tested with snellen's chart.
Test each eye separately
Ask the patient to read some print or to count fingers.

Colour Vision

Formally tested with Ishihara's chart
As a rough guide ask the patient whether they have any problems with the colours of the traffic light. Alternatively point to some coloured objects in the room or the hat pins can be used.

Visual Inattention

1. Ask the patient to look directly at your eyes and keep them fixed there.
2. Place your index fingers just at periphery of the temporal field of vision. Move your index fingers first in turn and then at the same time. Ask the patient to point to the finger that moves. In the presence of inattention, the patient will only point to one finger when both the fingers are moved. This denotes a parietal lobe lesion.

Visual Fields – confrontation test

1. First ensure you have the correct position, this is sat directly opposite the patient facing them.
2. For the peripheral field, ask patient to cover right eye with their right hand and close your left eye.
3. Start with the temporal field. With the hand stretched out at the far left , start to move your wagging finger (or the white hat pin) from the periphery to centre form both the upper and lower temporal quadrants. Let the patient know that he should inform you when he first sees the movement of the finger.
4. Asking the patient "Do you see it moving all the way" will pick up gross defects in the field of vision
5. Change your hands to repeat on the nasal side.
6. Repeat for the left eye in the same way.
7. Go slowly - don't rush as you may miss a visual field defect.
8. You might wish to test for the central visual field as well (detailed below)

The following tests can also be done at this step – they will test cranial nerve II and III

Direct and Consensual Light reflex

1. Stand at the side of the patient.
2. Ask the patient to fix their gaze straight ahead at point in the room.
3. Shine the torch into the eye - look at the eye the light is shone: watch for constriction of the pupil confirming that direct reflex is present. The second time look into the other eye in which light is not shone to see if the pupil constricts confirming the consensual reflex.
4. Repeat the above for the other eye.

5. Check for afferent papillary defect by swinging the light from one eye to other. (optional)

Accommodation

1. Ask the patient to fix their gaze straight ahead at a distant point
2. Then bring your index finger close to the tip of the nose and ask them to focus on it.
3. Look at the eyes they should converge and the pupils constrict.

Finish the above two steps if all findings are normal by saying "pupils are bilaterally symmetrical and reactive to light and accommodation. (PERLA)

Fundoscopy

Mention the need for Fundoscopy as well.

Occulomotor Cranial Nerve CN III Trochlear Cranial Nerve CN IV Abducent Cranial Nerve VI

These nerves are tested together because all three are responsible for ocular movements and also testing these now together saves valuable time.

Cranial Nerve	Muscle Supplied
OCCULOMOTOR CN III	ALL OTHER OCULAR MUSCLES
TROCHLEAR CN IV	SUPERIOR OBLIQUE
ABDUCENT CN VI	LATERAL RECTUS

1. Sit opposite the patient - Look out for ptosis/alignment of the eyes
2. Ask the patient to follow your index finger with their eyes. They should let you know if they see double.
3. Move your fingers in a "H" pattern covering all of the horizontal and vertical axes. This tests the pursuit movements of the eyes.
4. Now check for the saccadic movements by asking the patient to look from side to side rapidly ("Look at my palm and now my fist". This brings out internuclear ophtalmoplegia which might indicate demyelination.
5. Comment on your findings – " extraocular movements are free and full with no nystagmus or diplopia."

Trigeminal Nerve CN V

Remember it has two parts a sensory and motor part - always examine both components.

Sensory

Ask the patient to close their eyes and touch on both sides of the forehead (ophthalmic division) then their cheeks (maxillary division) and the jaw (mandibular division) with the wisp of cotton confirming whether it feels the same on both sides and can they appreciate it at all . ALWAYS COMPARE SIDES .
Mention that you would also like to test for the corneal reflex (where a wisp of cotton is taken and the junction of the sclera and cornea is touched eliciting a blinking action)as well.

Motor

1. Ask them to clench their teeth and feel both masseters and temporalis. "Clench your teeth"
2. Ask them to open their mouth against resistance to check the pterygoid muscles."Open your mouth – don't let me close them"
3. Jaw jerk

Facial Nerve CN VII

This also has two components a sensory and a motor.

Sensory

You can simply ask whether they have had any change in their sensation of taste at all.

Motor

1. Observe for any obvious weakness for instance flattening of nasolabial folds or involuntary movements e.g hemifacial spasm.
2. "Can I ask you to close your eyes tight – now let me open them"
3. "Show me your teeth" or "give me a smile"
4. Ask them to puff out their cheeks
5. "Raise your eyebrows" or "wrinkle your forehead"

VIII-XII

Vestibulocochlear Cranial Nerve VIII

This nerve has two components a vestibular and cochlear

Cochlear component

1. Inspect **BOTH** ears looking for .....
   - Discharge
   - Bleeding
   - Vesicles
   - Hearing aid
2. Hearing can be tested by rubbing your fingers held close to the ear
3. TUNING FORK TESTS

   Rinnes

   1. You are comparing two components of hearing - air conduction and the bone conduction .
   2. Take a tuning fork either of 512hz or 256hz frequency make sure you check!.
   3. Test for air conduction - Hold the vibrating tuning fork with the parallel to the external auditory meatus of the ear
   4. Then test for bone conduction by placing the base of the tuning fork on the mastoid process.
      Normally Rinne is positive
      - If Air Conduction>Bone Conduction then hearing is normal or sensory neural hearing loss
      - If Bone Conduction>Air Conduction then this is conductive hearing loss

   1. Now test for Weber's test – place the base of the tuning fork on the vertex of the skull of the patient. Ask the patient where they hear it best..

      Interpretation
      - *Lateralizes to the good ear in Sensory Neural Loss*
      - *Lateralises to the affected ear in Conductive Loss*
      - *Midline this is normal or Bilateral Hearing loss*

   6. Then mention that you would also like to do an otoscopy.

Vestibular component :

1.Check for nystagmus

2. Rombergs test : Ask them to stand with their feet together hands by sides and close their eyes. Be standing right next to them ready to catch them if they fall. Positive romberg's test is if the patient is more unsteady and tends to fall with the eyes close. This indicates sensory ataxia and NOT cerebellar ataxia.

3. Check for gait. Make sure you walk with them so that you may be able to hold them if they fall
4. Other tests: caloric test.

GLOSSOPHARYNGEAL NERVE CN IX VAGUS NERVE CN X

1. "open your mouth open please – now say "AAH" : look to see whether the uvula is central and the palatine arches rise symmetrically.
2. Assess quality of speech "No nasal intonation"
3. Say you would also like to check the gag reflex.

ACCSESSORY NERVE CN XI

1. "Shrug your shoulders please " – "Now don't let me push them down"
2. Then ask them to turn their face to the left against resistance and palpate the sternocleidomastoid of the right side and then repeat vice versa. "Please turn your head to the right and now to the left"

HYPOGLOSSAL NERVE CN XII

1. Ask the patient to open their mouth: look for any fasciculation or wasting of the tongue.
2. Ask the patient to stick their tongue out - it will deviate to the side of the lesion.
3. N
4. Then ask them to push their tongue against the inside of their cheeks against resistance.

EXAMINATION OF VISUAL FIELDS

1. Start with VISUAL ACUITY ALWAYS! Tell the examiner you are doing so to rule out any monocular blindness.
2. Check for visual inattention
3. Ensure that the patient has got intact colour vision (if you are using the white and red hat pin)
4. Check for peripheral visual fields as above - the peripheral visual fields can also be tested with the white hat pin
5. The central visual fields are tested with a red headed pin.
   Compare patient's right eye with your left as above.
   Move the red headed pin slowly at eye level from the temporal field to the centre and then to the nasal field
   Let the patient to inform you if the colour of the head of the pin changes or the head disappears. If there is central scotoma there will be loss of central field of vision.
   The blind spot can also be compared along the same lines (enlarged in papilloedema)
6. If you have time doing the light reflexes might yield useful findings like the RAPD in optic neuritis

TUNNEL VISION	BITEMPORAL HEMIANOPIA
Glaucoma Retinitis Pigmentosa Choridoretinitis Papiloedema	Pituitary Tumor Meningioma Craniopharyngioma

EXAMINATION OF EAR OF A PATIENT WITH DIZZINESS
VESTIBULOCOCHLEAR NERVE CN VIII

This is essentially the same exam as before but with added components - to try and localize the lesion

1. Test the Cochlear Component.
2. Test the Vestibular Component.
3. Perform one or two cerebellar signs
4. Otoscopy.
5. Mention that you would like to check Cranial Nerves V,VI,VII, IX and X to rule out the possibility of an Acoustic Neuroma.

EVALUATION OF A PATIENT WITH DIZZINESS/VERTIGO

- First start off by asking "Do you feel dizzy all the time or only when you stand up" ; as postural hypotension is a common cause of "dizziness". A standing and lying BP would exclude this
- Pallor – anaemia can make patients dizzy
- Pulse – Heart blocks can be symptomatic

- Assessment of cranial Nerve VIII as above
- Otoscopy
- Cerebellar examination – do one or two test for assessment of cerebellum
- Romberg's test
- Assessment of gait
- Mention that you would like to finish by
  - Auscultation of the heart and carotid artery.
  - Examination of cervical spine
  - Detailed neurological assessment
  - Hallpike's test (test for Benign Paroxysmal positional vertigo)

Causes of Vertigo

1, Peripheral causes – related to ear
   Meniere's disease (vertigo + Sensorineural hearing loss + tinnitus)
   Benign positional vertigo
   Acute Labyrinthitis
   Wax, infection.
   Motion sickness
   Ramsay hunt syndrome
   Drugs eg aminoglycosides

2. Central causes
   Migraine
   Stroke
   Multiple sclerosis

3. Cerebellar problems including cerebello – pontine angle tumour
4. Cervical spondylosis

In a history taking station of vertigo questions should be tailored to cover these areas.

PLAB Right Limited

EVALUATION OF A PATIENT WITH DIPLOPIA

- First confirm that the patient indeed has double vision
- Secondly confirm whether it is monocular or binocular diplopia. Monocular dipolpia usually indicates an ocular abnormality like refractive error or retinal pathology
- Thirdly localize which eye is responsible for diplopia and which muscle is responsible.

1. Inspect the eyes looking for : Ptosis, proptosis, alignment of eyes, head tilt, stigmata of head injury, aural discharge, neck swelling etc
2. Test the ocular movements in an H shape fully in the vertical and horizontal axes.
3. Are the images separated horizontally (side by side) or vertically? Horizontal separation is likely to indicate sixth nerve palsy or a medial rectus palsy (rare in isolation).
4. In which direction is the diplopia worse? – The direction of gaze in which the images are separated widely is the direction of action of the paretic muscle.
5. Once you know in which direction double is seen then ask them what they see.
6. The outer image is the false image - patient often says image is hazy or indistinct (seen by the eye with muscle weakness). The inner image is the true image seen by the normal eye. By covering the paretic eye the false image disappears.
7. Ask can you read the newspaper ok? Or do you have any problems getting down the stairs? Would indicate Superior Oblique Palsy.
8. Ask patient to count 1-20 in a single breath, if they tire suggests Myasthenia Gravis .
9. Check the direct and consensual reflex.
10. Assess cerebellar system - ?Multiple sclerosis
11. Finish by saying "I would like to do a Fundoscopy and complete neurological exam."

NEUROLOGICAL EXAMINATION OF UPPER LIMB

1. Greeting /Introduction.
2. Establishes identity of the patient.
3. Empathy/ Ensures comfort of patient.
4. Explains purpose of the visit/nature of the examination.
5. Takes consent for examination.
6. Appropriate exposure.
7. Chaperone.
8. INSPECTION
    a. Wasting
    b. Fasiculation
    c. Abnormal movements/tremor
    d. Abnormal posturing/deformities
    e. Check for pronator drift by asking patient to hold the arms out with palms facing up and close their eyes. Look for any drift of the arm suggestive of weakness. Also look for any winging of scapulae.

9. **TONE**: First ask the patient if they are sore in the arms or hands. Request them to let the arms go floppy. Passively bend the arm at the elbow and in the hands including the wrist in a rotatory manner.

10. **POWER**.
    a. Shoulder abduction : "Hold your arms out to the side – stop me pushing them down" : Supraspinatus and deltoid.
    b. Shoulder adduction: "Now push me down" : multiple muscles including pectoralis major
    c. Elbow flexion: "Bend your elbow – don't let me straighten it" : Biceps,brachioradialis

d. Elbow extension: "Now straighten it " (resist extension) : Triceps
e. Wrist extension : "Cock your wrist up – don't let me bend it down"
f. Wrist flexion : "Bend your wrist down – now don't let me straighten it"
g. Finger flexion : "Squeeze my fingers"
h. Finger extension: "Hold your fingers out – don't let me bend them" – radial
i. Finger abduction : "spread your fingers apart – don't let me push them together" (Dorsal interossei) - ulnar
j. Finger adduction : "Hold this paper between your fingers – now don't let me pull it away".(Palmar interossei) – ulnar
k. "Hold your thumb and little finger together – don't let me pull them apart" (Opponens pollicis) – Median nerve

11. **Pulses**. Quickly assess the vascular status by taking the pulses and checking capillary refill.
12. **Reflexes :** Biceps, Triceps, supinator jerks.
13. **Hoffmans' Sign** - place your right index finger under the distal interphlangeal joint of the patient's middle finger. Use your right thumb to flick the patients finger downwards. Look for any reflex flexion of the patients fingers.
14. **SENSATION-**

Pinprick

- Use neurotip.
- Let patient know the sharp and blunt end by using the sternum as a baseline.
- Ask him to close his eyes and to report whether it is sharp or blunt.
- Assess the sensation over the various dermatomes of the upper limb.
- With distal sensory impairment establish a sensory level
- DON'T FORGET TO BIN IT IN THE SHARPS BIN!!!!!!!!!!!!!!!!!!

PROPIOCEPTION

- Hold the middle finger of the hand and stabilise the joint distally by holding it by the sides
- With the patient's eyes open demonstrate that you will be moving the joint "UP" (towards their head) and "DOWN" (in the reverse direction)
- Then ask them to close their eyes
- Gently move the distal joint up and down and ask the patient to report the direction of movement

VIBRATION

Use a 128hz tuning fork not
Allow the patient to appreciate the vibration sense first over the sternum.
Then hold the vibrating tuning fork over the distal interphalyngeal joint

15. Co-ordination – elicit one of the cerebellar signs.(finger nose test)
16. FUNCTION- Ask patient to pick up a pen and write with it or undo and redo one of their shirt buttons.
17. Thank the patient.

PLAB Right Limited

NEUROLOGICAL EXAMINATION OF LOWER LIMB.

1. Greeting/Introduction.
2. Establishes identity of the patient/rapport.
3. Empathy/checks the comfort of the patient.
4. Explains purpose of visit/nature of exam.
5. Takes consent for examination.
6. Asks for chaperone.
7. Appropriate exposure.
8. INSPECTION
    a. Wasting
    b. Fasiculation
    c. Abnormal movements/tremor
    d. Abnormal posturing/deformities

9. TONE: First ask the patient if they are sore in the legs. Ask them to relax. Then either log roll the legs at the hips, then lift the knee and let it drop gently.

10. POWER-
    Hip flexion : "Lift your leg towards the ceiling – don't let me push it down"
    Hip extension : "Now push me down" (with your hands behind the thigh)
    Knee flexion : "Bend your knee – now don't let me straighten it"
    Knee extension : "Now push against my hand" (with your hand on the shin)
    Ankle dorsiflexion : "Cock up your foot - don't let me pull it down"
    Ankle plantar flexions : "Now push me down" (with your hand on the sole)
    If time allows you can check for ankle inversion/eversion.

    A Grade 5. No weakness.
    B Grade 4 Movement against gravity and resistance .
    C Grade 3 Movement against gravity but not against resistance.
    D Grade 2 Movement with gravity eliminated.
    E Grade 1 Flicker of contraction
    F Grade 0 No movement.

11. Pulses
12. Reflexes - Knee, Ankle, and Plantar reflex.
13. Sensations :

Pinprick

- Use neurotip.
- Let patient know the sharp and blunt end by using the sternum as a baseline.
- Ask him to close his eyes and to report whether it is sharp or blunt.
- Assess the sensation over the various dermatomes of the lower limb.
- With distal sensory impairment establish a sensory level e.g in diabetic foot.
- DON'T FORGET TO BIN IT IN THE SHARPS BIN!!!!!!!!!!!!!!!!!!

PROPIOCEPTION

- Hold the big toe of the patient and stabilise the joint distally by holding it by the sides
- With the patient's eyes open demonstrate that you will be moving the toe "UP" (towards their head) and "DOWN" (in the reverse direction)
- Then ask them to close their eyes
- Gently move the distal joint up and down and ask the patient to report the direction of movement

VIBRATION

Use a 128hz tuning fork not
Allow the patient to appreciate the vibration sense first over the sternum.
Then hold the vibrating tuning fork over the distal interphalyngeal joint. If patient does not report appreciation, then test at medial malleoli, then knee then iliac crest if it is impaired distally.

14. **Co-ordination-** ask patient to lift their leg high in the air and then touch the knee of the other leg with the heel of the raised leg by bringing it down and then they should slide leg down against the shin of the other leg.

15. **Function-** ask patient if they are ok to stand and if so then ask them to take a few steps to assess the gait. Then watch him walk heel to toe. Make sure you walk with the patient to support him in case he is unsteady. Finally perform romberg's test. Make sure you are with the patient during assessment.

EXAMINATION OF DIABETIC FOOT
Mr Anderson has been complaining of pins and needles in his right leg. He is a diabetic and is on insulin. Examine his foot.

Greeting/Introduction
Establishes identity of the patient
Empathy/Checks comfort of patient
Explains purpose of visit/nature of examination
Asks patient to undress
Asks for a chaperone
Takes consent for examination
Inspection:

a. Claw toes/ Pes Cavus
b. Callus formation
c. Ulcers/Gangrene
d. Looks for ulcers between toes
e. Skin , nails and hairs

Feels for temperature
Peripheral Pulses
Sensations (find out level of sensory impairment)

a. Fine touch
b. Pin prick
c. Vibration
d. Joint position

Assessment of Gait
Assessment of Motor functions
Assessment of reflexes
Checks suitability of footwear
Overall approach to the task
Thanks the patient

Annual review of a Diabetic Patient

Symptoms – Angina, Claudication, hypoglycaemia and side effects of drugs

1. Body mass index.
2. Urine – glucose , protein – albumin/creatitine ratio
3. Blood Tests : HbA1c; Urea and electrolytes , Cholesterol; LFT's particularly if on Metformin, TFT at 3 yearly intervals
4. B.P.
5. Eyes : visual acuity and retinal assessment
6. Habits - ? Smoking ? alcohol intake ; exercise ; check for compliance including diet
7. Review diabetic diary – check for home monitoring results and hypoglycaemic episodes
8. Assessment of feet
9. Compliance - correct tablet/insulin regime (Injection sites)
10. Address any other concerns and educate
11. Discuss future targets

Glasgow coma scale

Best Motor Response

6 Carrying out request ('obeying command') -patient does simple things you ask.
5 Localising response to pain. (apply over nail bed)
4 Withdrawal to pain - pulls limb away from painful stimulus.
3 Flexor response to pain - pressure on nail bed causes abnormal flexion of limbs - decorticate posture.
2 Extensor posturing to pain - stimulus causes limb extension - decerebrate posture.
1 No response to pain.

Best Verbal Response

5 Oriented
4 Confused conversation
3 Inappropriate speech
2 Incomprehensible speech - no words uttered, only moaning.
1 No verbal response.

Eye Opening

4 Spontaneous eye opening.
3 Eye opening in response to speech
2 Eye opening in response to pain.
1 No eye opening.

EXAMINATION OF PATIENT WITH MENINGITIS

1. Greeting/Introduction
2. Establishes identity of the patient/rapport.
3. Empathy/checks the comfort of the patient. Offer painkillers if in pain. Is he photophobic ? Would he prefer the light to be dimmed?
4. Explains purpose of visit/nature of exam.
5. Takes consent for examination.
6. Appropriate exposure and ABC and GCS
7. Temperature
8. Check for rash.
9. Check for neck stiffness : Ask patient if it is ok to move their neck and ask them to bend their neck touching their chest with their chin
10. Kernig's sign: Patient supine - flex the thigh so that it is at a right angle to the trunk – now completely extend the leg at the knee joint. If the leg cannot be completely extended due to pain, this is Kernig's sign.
11. Check the ear and nose for any discharge; signs of head injury
12. Ask the patient if they are sore anywhere in the face before palpating for tenderness, i.e. sinusitis, mastoiditis.
13. Examine the eyes - diplopia, Light reflexes- ask if they can manage if they refuse don't force them.
14. Check oral hygiene to rule out any dental infection.
15. Check cranial nerves and brief neurology including plantars
16. Check Bicep, Knee and Plantar reflexes

e. Systemic examination eg chest, abdomen to rule out possible infection elsewhere

17. Thank and cover the patient.

EXAMINATION OF PATIENT WITH HEADACHE

Airway
Breathing - respiratory rate and pattern
Circulation - Blood pressure and pulse
GCS
General appearance – ?photophobic
Temperature

Any stigmata of head injury
Eyes and periorbital areas - visual acuity , red eye (Glaucoma)

i. lacrimation, flushing, red eye Cluster headache)
ii. pupils including light response
iii. Assessment of visual fields (?space occupying lesion)
iv. Extraocular movements (?opthalmoplegia)

Ear, Nose and Throat assessment - also check for dental hygiene
Check for sinus tenderness
Check for Mastoid tenderness
Check for tenderness of temporal artery
Check for tenderness over cervical spine
Palpate temporomandibular joint for tenderness and crepitus when patient opens and closes the jaw.
Check for Neck stiffness and kernig's sign
Do brief neurology including remaining cranial nerves and upper and lower limbs as time allows.

PRIMARY SURVEY

Prerequisites:
Trauma team, gowned and gloved.

AIRWAY
Protect cervical spine – maintain inline stabilisation. (Once trachea assessed, then **triple immobilisation** of the cervical spine (c-spine) can be done. This implies

1. Application of cervical collar
2. Head restraints eg. Blocks, sand bags
3. strapping to the spinal board

Assess patency : Patient's ability to speak
Look : central cyanosis
Foreign bodies
Any obstruction
Listen: any added sounds

Deal any problems with the airway before moving on :
suction
simple airway manoeuvres for instance jaw thrust (Not head tilt, chin lift)
airway adjuncts e.g Guedel airway(if unconscious)
DO NOT DO BLIND FINGER SWEEP.
Give High flow oxygen via a non-rebreathe mask at 15 Litres per minute
Get patient connected to monitors (BP monitor, ECG monitor, pulse oximeter)

BREATHING
Assess : Rate and rhythm
Tracheal position
Symmetry of respiration;
Use of accessory muscles
Colour of patient
Oxygen saturation
chest expansion
Percussion and auscultation.
Auscultate

Manage according to the findings for instance in tension pneumothorax one would need to insert a wide bore needle in the 2nd intercostal space in the mid calvicular line on the affected side.

CIRCULATION
Assess : Pulse : rate, rhythm, volume and character
Blood pressure
Capillary refill
Look for any evidence of haemorrhage
- Examine abdomen for evidence of internal bleed : inform surgeons
- Pelvis – brusing of scrotum, bleeding from external urinary meatus.
- Lower limbs for any deformity/injury

Ensure that you feel for distal pulses.

Manage : Cannulate : ideally two large bore intravenous cannulae
Investigate : FBC/U & E/Glucose/Group and save/Toxicology
Fluid bolus : titrate to response as per trust guidelines.

Pelvic binder/Thomas splint/splint depending upon the site of injury

DISABILITY
Assess level of consciousness with AVPU
Alert
Does the patient response to **V**oice
Does the patient respond to **P**ain
Unresponsive
Pupil size and reaction
Peripheral nervous system.

EXPOSURE
Perform head to toe examination
Always maintain dignity and ensure that patient is kept warm
Investigations eg X ray cervical spine, chest and pelvis.

Mrs Harrison is in your clinic. Examine the cerebellar functions.

CEREBELLAR EXAMINATION

Greeting/Introduction
Establishes identity of the patient
Empathy/checks comfort of patient
Explains purpose of visit/nature of examination
Takes consent for examination
Finger nose test
Test for dysdiadochokinesia
Nystagmus
Assessment of Speech
Heel shin test
Assessment of Gait
Trucal ataxia/Romberg's sign
Assessment of tone
Assessment of reflexes
Does relevant examination for both sides
Does in a professional manner
Thanks the patient

Mr Smith is 46 yr old and was brought by paramedics to A & E. Paramedic's report that the family members alerted because Mr Smith was not responding.

EXAMINATION OF COMATOSE PATIENT

1. Checks identity of patient
2. Establishes a patent airway
3. stabilise cervical spine
4. Assess for breathing
5. Administers Oxygen
6. Establishes circulation
7. GCS
8. i.v access/ECG monitoring
9. Beside Blood Glucose measurement
10. Sends blood for investigations
11. Checks for pulse, B.P, capillary refill
12. Checks for temperature
13. Skin for rashes, iv marks
14. Pupils – size, symmetry, reaction
15. Checks for bracelets
16. Assess for signs of Head injury
17. ENT examination
18. Smells breath
19. Checks Neck stiffness/kernig's sign
20. Neck for swellings/tracheal position
21. Examines chest
22. Auscultation of the heart
23. Abdomen for Liver/spleen
24. Limbs for any obvious injury
25. Tone, power and reflexes
26. mentions need for corneal/gag reflex
27. Mentions need for opthalmoscopy
28. Takes a brief history of circumstances.
29. Performs in a professional manner.

Examination of Hemiplegic patient

1. Greeting/Introduction.
2. Establishes identity of the patient/rapport.
3. Empathy/checks the comfort of the patient.
4. Explains purpose of visit/nature of exam.
5. Takes consent for examination.
6. Appropriate exposure.
7. Airway, breathing and circulation (blood sugar as well)
8. Take pulse (?arrhythmia) and you'd also like to know the BP (?Hypertension)
9. Glasgow Coma Scale. (This would include speech as well)
10. Assess cranial nerves in particular visual fields, cranial nerves III, IV, VI and VII
11. Test tone and power of all four limbs.
12. Check the biceps, knee and plantar reflexes.
13. Percuss bladder : if full indicates need for catheterisation.
14. Auscultate the heart and carotid arteries.
15. State you'd like to perform a full neurological assessment.
16. State you'd like to perform a fundoscopy.
17. You would like to review drug history and CVS risk factors.
18. State you'd like to have an urgent CT scan.
19. Thank and cover the patient.

TELEPHONE CONVERSATIONS

SBAR

A detailed description of the steps involved:

S Situation:

- Identify yourself the site/unit you are calling from
- Identify the patient by name and the reason for your report
- Describe your concern

Firstly, describe the specific situation about which you are calling, including the patient's name, consultant, patient location, and vital signs. An example of a script would be: *"This is Lou, a junior doctor on Disney Ward. The reason I'm calling is that Jack Dee, in room 6, has become suddenly short of breath, his oxygen saturation has dropped to 88 per cent on room air, his respiratory rate is 44 per minute, his heart rate is 180 and his blood pressure is 120/50. We have placed him on 6 litres of oxygen and his saturation is 93 per cent, his work of breathing is increased, he is anxious, his breath sounds are clear throughout and his respiratory rate remains greater than 40."*

B Background:

- Give the patient's reason for admission
- Explain significant medical history
- You then inform the consultant of the patient's background: admitting diagnosis, date of admission, prior procedures, current medications, allergies, pertinent laboratory results and other relevant diagnostic results. For this, you need to have collected information from the patient's chart, flow sheets and progress notes. For example: *"Jack was admitted ten days ago, with right side chest infection. He developed complication in form of a right empyema for which a chest tube was put in place at Sheffield. The tube was removed two days ago and his CXR has shown significant improvement. He has been mobilising and progressing well. He is on IV antibiotics.*

A Assessment:

- Vital signs
- Contraction pattern
- Clinical impressions, concerns

You need to think critically when informing the doctor of your **assessment** of the situation. This means that you have considered what might be the underlying reason for your patient's condition. Not only have you reviewed your findings from your assessment, you have also consolidated these with other objective indicators, such as laboratory results.
If you do not have an assessment, you may say:
"I think he may have had a pneumothorax.'"
"I'm not sure what the problem is, but I am worried."

R Recommendation:

- Explain what you need - be specific about request and time frame
- Make suggestions
- Clarify expectations

Finally, what is your **recommendation**? That is, what would you like to happen by the end of the conversation with the physician? Any order that is given on the phone needs to be repeated back to ensure accuracy.

"Would you like me get a stat CXR? and ABGs? Start an IV?"
"Should I begin organising a chest drain?"
"When are you going to be able to get here?"

PLAB Right Limited

Proforma for History taking

Patient Details :
Name
DOB
Address
Marital Status
Occupation

PRESENTING COMPLAINT:
Record the complaint's in the own words of the patient.
HISTORY OF PRESENT ILLNESS
e.g. pain

1. When did it start?
2. How did it start?
3. What was the first thing that was noticed?
4. Progression
5. **S**ite
6. **O**nset
7. **C**haracter
8. **R**adiation
9. **A**ssociations
10. **T**iming of pain/duration
11. **E**xacerbating and Relieving factors
12. **S**everity

REVIEW OF SYSTEMS

PAST MEDICAL HISTORY

1. Hospital admissions : No of episodes/ interventions/outcome
   Document in chronological order
2. Any illness
3. Operations
4. Accidents

Enquire about common medical illness like
Diabetes Mellitus, Hypertension, Asthma, Heart disease, Stroke/mini stroke, Epilepsy

DRUG HISTORY

1. Tablets/injections
2. Off the shelf medications
3. Alternative medications
4. Pills/Hormones
5. Allergies : Nature of allergy?

FAMILY HISTORY:
Details of ill health in the family
Age at which illness started
Deaths

PERSONAL HISTORY/OCCUPATIONAL HISTORY

1. Smoking : how many? Smoked?snuffed?
   How long
   Tried to stop?

Pack year : 20 cigarettes/day for 1 year = 1 pack year

2. Alcohol:

1 unit = 9 gm of ethanol
= 1 glass wine
= ½ pint of beer.
= 25 ml measure of spirits

3. Recreational Drug use

? iv drug use
? share needles

4. Foreign travel
5. Occupational exposure to harmful materials

SOCIAL HISTORY - Important particularly in elderly or disabled patients

1. Accomodation: Lives alone/Warden controlled/Nursing Home
2. House type : number of flight of stairs? Any modifications?
3. Housing : Location of bedroom? Where is the toilet?
4. Family dynamics : Who is at home? Any dependants?
5. Activities of daily living (cooking/washing/shopping/ dressing)
6. Services : Home help/ District Nurse/ Meals on wheels/Social worker
7. Leisure activites
8. Any pets

IMPACT

1. How has the symptoms affected the patient?
2. What can the patient not do because of the illness?
3. How has the symptoms affected work/relationships?

UNDERSTANDING/BELIEFS/CONCERNS

What beliefs does the patient have about their illness

PLAB Right Limited

Practice Mock test 1

Following stations should be practiced in groups of 3. One person takes on the role of a patient, other becomes Examiner and 3rd person will do the task.
Examiner can use the following guide to assess the performance. Examiner should also manage the time
Actor should read the "instruction to the actor" and simulate the clinical scenario given

HISTORY TAKING: WEIGHT LOSS

53 Yr old Mr Rutherford is concerned that he has been loosing weight for last 6 months. Take a history and discuss the management with the patient.

Examiners Mark Sheet

Greeting/Introduction
Establishes identity of patient/Rapport
Empathy/checks comfort of patient
Explains purpose of visit
Identifies the topic for discussion
Degree of weight loss
Duration of weight loss
Appetite
Gastrointestinal symptoms
Psychological factors
- a. Preoccupation with body weight/food
- b. Stress at home/work
- c. Self induced vomiting/Excessive exercise

Associated symptoms
- a. Amenorrhoea
- b. Skin rash/Red eyes
- c. Tremor/palpitations
- d. Heat intolerance
- e. Polyuria/Polydipsia
- f. Fever, night sweats, lethargy
- g. Cough, shortness of breath, leg swelling
- h. Low mood, suicidal ideas

Dietary history : Normal diet and eating pattern
Elicits beliefs and concerns
Past Medical History
Drug History : Laxative abuse/Diuretic abuse
Personal history : Smoking/alcohol/recreational drugs/sexual partners
Occupational History : job and stresses at work
Family History
Ensured understanding of patients problems/concerns
Made a reasoned assessment of patient's problem
Summarised and clarified further actions
Thanks the patient

Instructions to the actor:
You are 35 yr old and you have been loosing weight for 6 months. You were weight was 13 stones and now it is 11 stones. You have lost appetite and have been eating less. You do not have any other symptoms.

DIFFERENTIAL DIAGNOSIS

Below is the DD for weight loss along with some cardinal symptoms

HYPERTHYROIDISM

- Tremors and palpitations
- Heat intolerance
- Weight loss despite increased appetite
- Diarrhoea

CARDIAC FAILURE

- Dyspnoea
- Orthopnea
- Paroxysmal Nocturnal Dyspnoea
- Peripheral oedema
- Cough

TUBERCLOSIS

- Weight loss
- Cough
- Night sweats
- Lethargy
- Haemoptysis
- Lymph node enlargement
-

MALIGNANCY

- Weight loss
- Cough
- Lethargy
- Haemoptysis
- Long history of smoking
- Dyspnoea

LYMPHOMA

- Night sweats
- Lymph node enlargement
- Fever
- Weight loss
- Fatigue

DIABETES MELLITUS

- Polydypsia
- Polyuria
- Weight loss
- Tiredness
- Polyphagia
- Visual changes

ANOREXIA NERVOSA

- Extreme weight loss
- Amenorrhea
- Constipation
- Fatigue
- Severely decreased appetite
- Excessive exercise

DEPRESSION

- Low mood
- Decreased appetite
- Insomnia
- Guilt
- Suicidal thoughts
- Weight loss

HIV

- Weight loss
- Asymptomatic
- Fever
- Myalgia
- Pharyngitis

43 Yr old Mr Lang has coughed up blood twice in last 2 days. Take a history and discuss the management with the patient

Examiners Mark Sheet

HAEMOPTYSIS: HISTORY TAKING

Greeting/Introduction
Establishes identity of patient/Rapport
Empathy/checks comfort of patient
Explains purpose of visit
Identifies the topic for discussion
Onset and Duration
Amount/Frequency
Nature (fresh/mixed with sputum)
Progression
Aggravating/Relieving factors
Associated symptoms

a. Chest pain/Shortness of breath
b. Fever, Night sweats
c. Cough
d. Weight loss/Appetite
e. Bleeding gums/Easy bruising
f. Joint pain/rash
g. Lumps in neck
h. Hoarseness of voice
i. Pain/swelling of calf

Travel History
Recent Surgery/Immobility
Past Medical History
Drug history – Warfarin
Personal History – Smoking
Occupational History
Family History
Ensured understanding of patients problems/concerns
Made a reasoned assessment of patient's problem
Summarised and clarified further actions
Thanks the patient

Instruction to the actor:
You are Mr Lang 43 yr old. You coughed up blood on 2 different occasions in last 2 days. On both the occasion the blood was bright red in colour about 5ml. It was not mixed with sputum
You have been having cough for last 3 months. You are not a smoker.

DIFFERENTIAL DIAGNOSIS

MALIGNANCY

- Weight loss
- Cough
- Lethargy
- Haemoptysis
- Long history of smoking
- Dyspnoea

TUBERCLOSIS

- Weight loss
- Cough
- Night sweats
- Lethargy
- Haemoptysis
- Lymph node enlargement

PULMONARY EMBOLISM

- Haemoptysis
- Chest pain (pleuritic)
- Dyspnoea
- Cough
- Rapid breathing

CARDIAC FAILURE

- Dyspnoea
- Orthopnea
- Paroxysmal Nocturnal Dyspnoea
- Peripheral oedema
- Cough
- Weight loss
- Haemoptysis (pink sputum)

PNEUMONIA

- Cough
- Chest pain
- Fever
- Haemoptysis
- Night sweats
- Dyspnoea

BRONCHIECTASIS

- A daily cough, over months or years
- Daily production of large amounts of sputum.
- Shortness of breath and wheezing (a whistling sound when you breathe)

VASCULITIS (e.g Goodpasture's syndrome)

- Haemoptysis
- Chills
- Fever
- Chest pain
- Hematuria

Bleeding problems e.g Leukemia, high INR (on warfarin)

28 yr old Emma Scott is complaining for feeling tired for last 6 months. Her GP has done few investigations and they were normal. Your are SHO in medicine, take history and discuss the managements with the patient

Examiners Mark Sheet

PLAB Right Limited

HISTORY TAKING – TIREDNESS

Greeting/Introduction
Establishes identity of patient/Rapport
Empathy/checks comfort of patient
Identifies the topic for discussion
Clarifies nature of symptoms
Elicits details of symptoms:

a. Duration and pattern
b. Severity of symptoms
c. Rate of progression
d. Exacerbating /Relieving factors

Associated Symptoms

a. Constipation/Diarrhoea
b. Fever, night sweats, rigors
c. Nausea, vomiting, polyuria
d. Shortness of breath/swelling of legs
e. Lack of energy/lethargy
f. Muscle/joint pain
g. Memory/concentration/mood

Haematological symptoms
Dietary intake
Changes in weight
Sleep: pattern, features of obstructive sleep apnoea
Functional impairment
Elicits beliefs and concerns.
Past medical history
Drug History
Menstrual history (in females)
Personal history: Smoking/alcohol/ Recreational drugs.
Occupational history: Job, Effect on symptoms
Ensured understanding of patient's problems/concerns
Made a reasoned assessment of patient's problem
Summarised and clarified further actions
Thanks the patient

Instructions to the actor
You are 28 yr old, started to feel tired 6 months ago. At that time you remember having fever for 4 days. Following that you noticed that you were getting easily tired.
You don't have any other positive symptom other than this symptom.

Mr Thompson is in A & E. He is complaining of sudden onset of weakness of his left side of the body. Take history and discuss about the management

STROKE –HISTORY TAKING AND RISK FACTORS

Greeting/Introduction
Establishes identity of patient/Rapport
Empathy/checks comfort of patient
Explains purpose of visit
Identifies the topic for discussion
Establish nature of deficit
Onset and Duration
Severity of symptoms
Pattern of Symptoms
Progression of symptoms
Associated symptoms
- Headache, Nausea, vomiting
- Loss of consciousness/fits
- Numbness/Weakness in other parts
- Visual disturbances/double vision
- Vertigo
- Swallowing / Speech problems
- Bowel/Bladder problems

Functional consequences
Past Medical History :
- TIA/Stroke
- Hypertension/Diabetes Mellitus
- Increased Cholesterol
- Heart disease
- Peripheral Vascular disease
- Bleeding/clotting abnormalities

Drug History:
- HRT/OCP
- Anticoagulants/Aspirin

Personal History : Smoking/Achohol
Family History of Stroke/Heart disease
Social History: Family/social support
Ensured understanding of patients problems/concerns
Made a reasoned assessment of patient's problem
Summarised and clarified further actions
Thanks the patient

Instructions to the actor

You are 38 yr old and have attended to A & E because you have noticed weakness of left side of your body. You noticed it in the morning.
The weakness is not getting worse nor getting better.
You suffer from blood pressure. You have headache No other symptoms

Mrs Smith is 43 yr old lady complaining of racing heart beat. She is worried about her condition and feels that it is making her situation worse. Take history and discuss the management.

PALPITATIONS – HISTORY TAKING

Greeting/Introduction
Establishes identity of patient/Rapport
Empathy/checks comfort of patient
Explains purpose of visit
Identifies the topic for discussion
Onset,Duration and frequency
Nature (Constant/ Intermittent)
Establishes Rate and Rhythm (asks to tap)
Mode of termination (sudden/gradual)
Precipitating factors
Aggravating/Relieving factors
Associated symptoms

a. Chest pain/Shortness of breath
b. Dizziness/Loss of consciousness
c. Headache/sweating
d. Intolerance to heat/tremors/Diarrhoea
e. Feeling of impending doom

Past Medical History:

a. Cardiac illness
b. Hypertension
c. Strokes
d. Diabetes Mellitus

Drug History

a. Anti Diabetic
b. Digoxin/Beta blockers
c. Recent Discontinuation/ Introduction

Personal History – smoking / Alcohol
Family History of Cardiac illness
Social History: Family/relationship crisis
Elicits beliefs and concerns
Effect on work/activities
Ensured understanding of patients problems/concerns
Made a reasoned assessment of patient's problem
Summarised and clarified further actions
Thanks the patient
FEEDBACK:

Instructions to the actor:
Mrs Smith is 43 yr old she started to feel the racing hear beats for last 3 days. She has noted that sometime it can be irregular. It occurs especially when she is excreting.
History of hypertension

Mr Ratcliff is 46 yr old and he is complaining of severe knee pain. He has attended the A & E. Take history and discuss about the management.

HISTORY TAKING – JOINT PAIN

Greeting/Introduction
Establishes identity of the patient
Empathy/Checks comfort of patient
Explains purpose of visit
Confirms symptom for discussion
Site and symmetry of involvement
Onset and Duration
Radiation
Periodicity
Progression
Precipitating factors including trauma
Aggravating/relieving factors
Characteristics of affected joint
Diurnal variation in symptoms
Associated symptoms

a. Rash, mouth ulcers, photosensitivity
b. Fever, Weight loss
c. Abdominal pain
d. Bowel problems
e. Eye problems
f. Urethral discharge/Urinary symptoms

Past Medical History
Drug History – Thiazides, Salicylates
Personal History: Alcohol
Dietary History
Family History
Functional consequences
Ensured understanding of patients problems/concerns
Made a reasoned assessment of patient's problem
Summarised and clarified further actions
Thanks the patient

DIFFERENTIAL DIAGNOSIS OF JOINT PAIN

SEPTIC ARTHIRITIS

- Monoarthritis
- Joint Pain
- Red
- Swollen
- Hot
- Hx of trauma?
- Steroid use
- Immunosupressed

VIRAL ARTHRITIS

- Joint pain post infection rubella, mumps, hepatitis and enteroviruses.
- Altered bowel habit
- Eye problems
- Systemic involvement

RHEUMATIC FEVER

- Post pharyngeal infection
- Nodules
- Erythmea marginatum
- Migratory Poly arthritis
- Arrhythmia

RHEUMATOID ARTHIRITIS

- Smaller joints
- Symmetrical involvement
- Morning stiffness
- Eye problems

ANKYLOSING SPONDYLITIS

- Young males
- Morning stiffness
- Sacro-iliac joint involvement
- Eye pain
- Eye redness
- Photophobia

OSTEOARTHIRITIS

- Age > 50 years unless secondary to other joint pathology
- Joint pain worse at end of day
- Pain on movement
- Loss of function

REITERS DISEASE

- Conjuctivitis
- Urethritis
- Joint pain
- Sexual contact

GOUT

- Excruciating sudden onset
- Big toe affected
- Skin changes
- Precipitated by diet, alcohol and certain medications

HI Mrs. Doreen Lawrenson is a 62 year old lady from Scotland.
Four months ago, she had noticed that her voice had become 'croaky'. Take history and discuss the differential diagnosis with the examiner

HISTORY TAKING – HOARSENESS OF VOICE

Greeting/Introduction
Establishes identity of the patient/Rapport
Empathy/Checks comfort of patient
Explains purpose of visit
Establishes symptom for discussion
Duration
Mode of onset
Severity
Progression
Precipitating factors
Exacerbating/Reliving factors
Associated symptoms

a. Fever
b. Cough, haemoptysis
c. Weight loss
d. Difficulty swallowing
e. Ear pain/throat pain
f. Difficulty/noisy breathing
g. Cold intolerance
h. Appetite
i. Lumps in neck

Past Medical History: asthma, heartburn, allergies
Personal history: Smoking, alcohol
Drug History
Occupational History
Family History
Ensured understanding of patient's problems/concerns
Summarised and clarified further actions
Thanks the patient

Instructions to the actor

Mrs. Doreen Lawrenson is a 62 year old lady from Scotland. She works as a cleaner at the Royal Marsden Hospital.
Four months ago, she had noticed that her voice had become a bit funny which she describes as 'croaky'. Over time, she has not noticed any improvement in her voice and has rather noted it to be getting progressively worse. The voice remains 'croaky' through out the day with no particular worsening or improvement during any time. She has not noted any thing in particular that would make it better or worse. She has never had a similar episode in the past.

Over the last two years she has been struggling with her breath. She initially started with cough and phlegm that was mucoid. She had two occasions of yellowish phlegm that was associated with fever and required antibiotics. A chest X ray was reported to be normal. She was subsequently started on Ipratropium inhalers which did not help her much and frequently required salbutamol inhalers. She has noted that at times she gets short of breath. She was subsequently referred to the respiratory unit and was prescribed beclomethasone inhaler and her symptoms have eased a lot. However she does not use any spacer for the beclomethasone inhaler and does not gargle after using the inhalers. She recalls that prior to the institution of beclomethasone, her voice was normal
Continues in next page

She denies history of haemoptysis or shortness of breath at rest. She sleeps with two pillows. She does not have history of indigestion and heart burn. She denies any problems with swallowing and

her appetite is normal. She has not lost any weight and has not noted any glands in her neck. She does not give a history of recent sore throat. Her bowels are normal and she does not have any preference for a particular type of weather. She has not had any exposure to chemicals or to smoke

She has had a hysterectomy 12 years back for undiagnosed vaginal bleeding. She lives with her husband whom she describes as a supportive gentleman. She has not been overusing her voice. She has smoking 15 cigarettes a day for the past 40 years and drinks beer on the weekends. She does not have any stress at work or at home. She is trying to stop smoking but is finding it hard. She is worried about that the hoarseness might be a symptom of cancer.

DIFFERENTIAL DIAGNOSIS

VIRAL LARYNGITIS
Fever
Sore throat
Loss of voice
Tiredness

LARYNGEAL CARCINOMA
Hoarseness
Sore throat
Persistent cough
Hx of smoking

HYPOTHYROIDISM
Weight gain
Cold intolerance
Depression
Fatigue
Constipation

VOCAL CORD POLYPS
Vocal fatigue
Stridor
Excessive use of voice

CHRONIC LARYNGITIS – numerous causes including smoking
Use of steroid inhalers or other drugs causing dryness of mouth and throat.
Secondary to gastroesophageal reflux disease

Mr. Andrew Bliss is a 46 year old gentleman who works as a carpenter with the Merseyside Company. He has been referred to your clinic by the general practitioner with a history of seeing "things double" for the last one month. Take history and discuss diferential diagnosis with the examiner.

HISTORY TAKING FOR DIPLOPIA

2. Greeting/Introduction
3. Establishes identity of patient/Rapport
4. Empathy/checks comfort of patient
5. Explains purpose of visit
6. Identifies the topic for discussion
7. Elicits details of symptom
    a. Onset – sudden/gradual
    b. Intermittent/continuous
    c. Severity
    d. Duration
    e. Progression
    f. Aggravating/Relieving factors
8. Establishes Monocular/Binocular diplopia
9. Orientation of images
10. Vision
11. Associated symptoms:
    a. Droopy eyes
    b. Problems with speech, swallowing, Speaking
    c. Weakness/numbness
    d. Headache/vomiting/Loss of consciousness
12. Diurnal variation
13. Past medical History
    a. Any similar/visual problems in the past
    b. Diabetes/Hypertension
    c. Head injuries
14. Drug History
15. Family History
16. Ensured understanding of patients problems/concerns
17. Summarised and clarified further actions
18. Thanks the patient

Instructions to the actor

Mr. Andrew Bliss is a 46 year old carpenter who works with the Merseyside Company.

He has been referred to your clinic by the general practitioner with a history of seeing "things double" for the last one month. The double vision is intermittent and is worse towards the end of the day. He sees double in all directions and has not noted any improvement in a particular direction of gaze. He wife has mentioned to him that his eyes go droopy when he is watching the television. He thinks that all his symptoms are due to excessive fatigue at work.

He mentions that he feels unusually tired, more so towards the end of the day. He struggles to manage the flight of stairs that lead from the underground workshop in the company. However, he does feel refreshed and "strong" in the morning hours.

Continues to next page

He does not have problems with swallowing, chewing, speaking or breathing and his bowel and bladder habits are normal. His eyesight is normal and he has not noted any redness or pain in his eyes. He has had not problems with his eyesight in the past. He does not have any history of headache, loss of consciousness, dizziness or unsteadiness.

He has noticed some weakness in his hands and legs. He cannot work with the electric saw for a long period of time as his hands go unusually weak. After resting for a good period of time he gets his "power back in the muscles". He does not have any pins and needles. He has not lost any weight and his appetite is normal.

He does not have any significant past medical history and he is currently on Vitamin B tablets which he purchased over the counter. He does not have any allergies and there is no family history of joint pains, anaemia or thyroid problems. He doesnot suffer from diabetes and has not sustained any injuries to his head.

He is a non smoker and drinks about 15 units of spirits per week. He lives with his wife. He is concerned that he is struggling with his work because of his symptoms.

Differential diagnosis.

1. Opthamoplegia – 3rd, 4th or 6th cranial nerve palsy – causes could include:
   Any cause of raised Intracranial pressure eg tumour
   Any cause of mono neuritis e.g. diabetes
   Cavernous sinus lesions/thrombosis
   Vascular eg posterior communicating artery aneurysm, stroke
2. Myasthenia Gravis
3. Multiple Sclerosis
4. Diabetes Mellitus/ Hypertension
5. Head Injury
6. Thyroid opthalmoplegia
7. Stroke.
8. Drugs

HISTORY TAKING – CHEST PAIN

1. Greeting/Introduction
1. Establishes identity of patient/Rapport
2. Empathy/checks comfort of patient
3. Identifies the topic for discussion
4. Elicits details of pain
    a. Site of Pain
    b. Onset/Duration of pain
    c. Character and Intensity of pain
    d. Sites of radiation
    e. Progression
    f. Relieving/Exacerbating factors
5. Associated symptoms
    a. Palpitation, SOB, dizziness, sweating
    b. Fever, Cough, Pain on inspiration, haemoptysis
    c. Bloating, heartburn, relation to meals
    d. Pain on movement, relation to posture
6. Sequence of symptoms
7. Risk factors for IHD
    a. Smoking
    b. Diabetes/Hypertension
    c. History of IHD/PVD/CVA
    d. Alcohol/Hyperlipidemia
8. Risk factors for DVT
    a. History of travel abroad
    b. Prolonged immobility
    c. OC pills
    d. Past History of clots
9. Past Medical History
10. Family History of IHD/PVD/Clots
11. Social History –housing (stairs)
12. Ensured understanding of patients problems/concerns
13. Summarised and clarified further actions
14. Thanks the patient

Instructions to the actor

Mr. Arthur Morris is a 62 year old barman from Warrington. He gives a history of pain in the left side of chest pain since the last three days.
He describes the pain as a dull ache and is particularly brought about by exertion. The pain is mainly in the left side of his chest and lasts for 3 -10 minutes before it subsides with rest. He has noted 3 similar episodes of pain in the last three days and every episode has been brought by climbling two flights of stairs.

The pain radiates to his neck and he has noted occasional nausea during the pain. He has not noted any problems with breathing and eating. He denies any history of cough, palpitations, syncope, indigestion, leg swelling, haemoptysis or sweating.
He smokes around 23 cigarettes a day and he started it around 40 years back. He does not drink alcohol. He had been to see his general practitioner who advised him to lose weight as he was weighting 92 kilograms. His father died of heart attack at the age 0f 65. He is currently on simavastatin for raised serum cholesterol. He lives with this wife who suffers from bronchial asthma.
Pitfalls/Clues
Chest pain is a very common condition and includes a wide spectrum of conditions ranging from acute coronary syndrome to musculoskeletal chest pain. A tailored history should be undertaken according to the symptoms to arrive at a differential diagnosis.

PLAB Right Limited

Practice Mock test 2

Following stations should be practiced in groups of 3. One person takes on the role of a patient, other becomes Examiner and 3rd person will do the task.
Examiner can use the following guide to assess the performance. Examiner should also manage the time
Actor should read the "instruction to the actor" and simulate the clinical scenario given

Mr. Robert Worthington is a 75 year old retired barman.
He has now been brought to the medical assessment unit complaining of shortness of breath on mild exertion. Take a detailed history and formulate.

HISTORY TAKING – SHORTNESS OF BREATH

1. Greeting/Introduction
1. Establishes identity of patient/Rapport
2. Empathy/checks comfort of patient
3. Explains purpose of visit
4. Identifies the topic for discussion
5. Elicits details of symptom
    a. Onset /Duration
    b. Episodic/continuous
    c. Severity (exercise tolerance)
    d. Rate of Progression
    e. Aggravating/Relieving factors
6. Diurnal variation/Weekend symptoms
7. Associated symptoms
    a. Cough – Productive/dry
    b. Haemoptysis
    c. Wheeze
    d. Chest pain/orthopnea/PND
    e. Ankle swelling
8. Functional assessment
    a. Effect on Activities of daily living
    b. Orthopnea (Quantify number of pillows)
9. Past Medical History/Admissions
10. Personal History – Smoking/pets/hobbies.
11. History of Atopy /Allergy
12. Occupational History
13. Travel History
14. Family History
15. Social History (housing –stairs)
16. Ensured understanding of patients problems/concerns
19. Summarised and clarified further actions
20. Thanks the patient

Instructions to the actor:

Mr. Robert Worthington is a 75 year old retired barman.

He initially presented to his general practitioner three years back with the symptoms of shortness of breath that was associated with cough, wheezing and yellowish phlegm. He was treated with antibiotics and noted a slight improvement in symptoms. Prior to that, he was a perfectly fit and healthy man and used to run a mile every morning with his dog.

He attended the surgery with same symptoms after 5 months. He had not lost any weight and did not give history of haemoptysis. He was then prescribed salbutamol inhaler and beclomethasone inhaler and his symptoms had eased a lot.

He has now been brought to the medical assessment unit complaining of shortness of breath on mild exertion. He gets short of breath after walking 20 meters on the flat and can hardly negotiate inclines. He struggles to go to the toilet which is situated in the 1st floor of the house. He mentions of wheezing that has been constant. His cough has been disturbing his sleep and has been

bringing up whitish phlegm constantly. The symptoms are constant through out the day. He denies chest pain, fever or weight loss. He has not noticed any swelling of the ankle. He has never required hospital admission

He has not noticed any particular triggers. He does not have any allergies and is on thaizide diuretics for hypertension. He has no pets at home. He lives with his wife and she does the cooking, washing and shopping. He feels uncomfortable that he has not been able to help his wife due to his symptoms.

He smoked 25 cigarettes a day from the age of 16 and stopped it three years back when his chest started to bother him. He does not drink alcohol. He is concerned that his breathlessness is affecting his activities of daily living and his inhalers are not of much help.

Mr. Ian Ellis is a 32 year old school teacher from London.

He complains of frequent episodes of loose motions take history and discuss about the diagnosis and management with Mr Ellis

ALTERED BOWEL HABITS – HISTORY TAKING

Greeting/Introduction
Establishes identity of patient/Rapport
Empathy/checks comfort of patient
Explains purpose of visit
Identifies the topic for discussion
Establishes Normal Bowel habits
Establishes present bowel habits
Onset and duration of symptoms
Frequency and consistency of motions
Colour of motions
Presence of blood/mucus
Aggravating/relieving factors
Progression of symptoms
Associated symptoms

a. Abdominal pain
b. Tenesmus
c. Joint pain
d. Skin rash/eye problems
e. Vomiting
f. Stress/anxiety

Change in appetite/Body weight
Elicits beliefs and concerns
Treatment History
Past Medical History
Personal History – smoking/alcohol
Drug history
Family History of IBD/Polyps/Cancer
Ensured understanding of patients problems/concerns
Summarised and clarified further actions
Thanks the patient

Instructions to the actor:
Mr. Ian Ellis is a 32 year old school teacher from London.

He complains of frequent episodes of loose motions which he describes as 'watery'. He typically opens his bowels 2 -3 times a day. The motions are watery and at times mixed with blood and mucus. He occasionally has to get up in the night to open his bowels. Since the last couple of days he has noted that he has been opening his bowels up to 5 times a day. He gives a history of nausea but has never vomited. He does not have a history of fever.

He also mentions of pain in his lower abdomen which has been around for almost 3 months. His symptoms started with pain and then after a week he noticed loose motions. The pain is not continuous and can come at any time of the day and he has not noted any relationship with meals or motions. On further questioning, he describes that it is rather a discomfort than pain.

He has not been outside the United Kingdom for the last year or so. He also mentions of generalised tiredness and this has been worse over the last week. His appetite has not been very good and on three separate occasions over the last 2 months he has been bothered by painful ulcers in his mouth. He had seen his general practitioner 2 weeks back for redness in his right eye which was associated with discomfort and is waiting for his appointment with the eye clinic.
He does not give any history of joint pains. He mentions that he has lost about a stone during this illness.

He has not taken antibiotics in the last two years and has not been in contact with anyone with diarrhoea or vomiting. There is no family history of tuberculosis or celiac disease. He has not had any surgery and does not suffer from any other medical illness.

He is married to a doctor and describes his relationship as an excellent one. He is a non smoker and drinks approximately 15 units of lager per week. He does not have any history of infections transmitted through sex. He has found his symptoms disturbing his career and is worried about it.

DIFFERENTIAL DIAGNOSIS
INFLAMMATORY BOWEL DISEASE

- Abdominal cramps
- Bloody diarrhoea
- Severe urgency to have a bowel movement
- Fever
- Loss of appetite
- Weight loss
- Fatigue (Anaemia due to blood loss)
- Arthiritis
- Eye inflammation and irritatation
- Skin changes

INFECTIOUS DIARRHEA

- Frequent watery stools sometimes bloody
- Fever
- Chills
- Vomiting
- Malaise
- Abdominal pain

MALABSORPTION

PANCREATITIS

- Severe upper/central abdominal pain
- Abdominal swelling/tenderness
- Nausea and vomiting
- Fever

- Sweating
- Back or abdominal pain

COELIAC DISEASE

- Diarrhea / constipation
- Chronic bloating/indigestion
- Poor appetite
- Abdominal cramping pain / distension

BOWEL CANCER

- Bleeding from the back passage (rectum) or blood in your stools
- A change in normal bowel habits towards diarrhea or looser stools that lasts longer than 6 weeks
- A lump that your doctor can feel in the right side of your abdomen, or in your rectum
- A straining feeling in the rectum
- Losing weight
- Pain in your abdomen or rectum
- Anaemia (a low level of red blood cells

IRRITABLE BOWEL SYNDROME

- Diagnosis of exclusion
- Long periods of alternating bowel habits with no pathological cause

56 Yr old Mr Rutherford complains that his voice has changed. Take history and address Mr Rutherford's concerns.

HISTORY TAKING – HOARSENESS OF VOICE

Greeting/Introduction
Establishes identity of the patient/Rapport
Empathy/Checks comfort of patient
Explains purpose of visit
Establishes symptom for discussion
Duration
Mode of onset
Severity
Progression
Precipitating factors
Exacerbating/Reliving factors
Associated symptoms

a. Fever
b. Cough, haemoptysis
c. Weight loss
d. Difficulty swallowing
e. Ear pain/throat pain
f. Difficulty/noisy breathing
g. Cold intolerance
h. Appetite
i. Lumps in neck

Past Medical History: asthma, heartburn, allergies
Personal history: Smoking, alcohol
Drug History
Occupational History
Family History
Ensured understanding of patient's problems/concerns
Summarised and clarified further actions
Thanks the patient

Instruction to the actor:
You are a manager in a Bank. You live with your wife. You have been smoking 20 cigarettes for more than 30 years. You noticed the hoarseness 6 months back. It is progressively getting worse. You sometime find it difficult to swallow but it is not a major problem.

Ask following questions to the candidate
Can this be cancer?
How can you help me?

Mr Baldwin is a 45 yr old gentleman who has come to see you because of red eye. You are an SHO in the accident and emergency department. Take a history and discuss the diagnosis with the examiner.

RED EYE – HISTORY TAKING
Greeting/Introduction
Establishes identity of patient/Rapport
Empathy/checks comfort of patient
Explains purpose of visit
Identifies the topic for discussion
Duration
One/both eyes
Mode of onset: sudden/gradual
Nature of symptoms: constant/Intermittent
Aggravating/Relieving factors
Changes in vision
Associated symptoms

a. Pain
b. Headache
c. Discomfort/irritation
d. Discharge /sticky eyes
e. Dry/gritty eyes
f. Itching/burning sensation
g. Photophobia
h. Vomiting
i. Spots/haloes around light

History of trauma to eye
History of Urethral discharge
Fever, Joint pain, Skin rashes
Back pain/stiffness
Bowel problems
Past Medical History:
Family History of similar problems/Glaucoma
Similar problems in community/workplace
Ensured understanding of patients problems/concerns
Made a reasoned assessment of patient's problem
Summarised and clarified further actions
Thanks the patient

Instruction to the actor:
You are Mr Baldwin. You have noticed that for last 3 months your eyes are going red. You also have pain in the evening. Your father had glaucoma. You work fulltime as a teacher.

PLAB Right Limited

ACUTE GLAUCOMA	Severely painful, haloes around lights, may be systemically unwell (nausea, vomiting, headache). Usually > 50yo.		
KERATITIS	Photophobia, foreign body sensation ± history of contact wear ± previous episodes (e.g. herpes simplex infection).		
ACUTE ANTERIOR UVEITIS	Photophobia, blurred , headache, pain on accommodating. May have been unresponsive to previous treatment for conjunctivitis.		
Trauma e.g. foreign body (FB)	Pain depends on type of trauma, severity and location.		
The acute non painful red eye[2]			
CONJUCTIVITIS	Discomfort (moderate to severe pain - suspect more serious pathology), photophobia rare unless severe from of adenoviral infection which may involve the cornea, discharge ± history of contact ± history of allergen exposure.		
EPISCLERITIS	Mild discomfort, few symptoms.		
SUBCONJUCTIVAL	May be spontaneous or traumatic, can occur after prolonged		

Mrs Thompson has come to A & E complaining of headache. Take a history and discuss the diagnosis with the examiner

HISTORY TAKING FOR HEADACHE

Greeting/Introduction
Establishes identity of patient/Rapport
Empathy/checks comfort of patient
Explains purpose of visit
Identifies the topic for discussion
Details of Headache
- Site of pain
- Character of pain
- Onset and Duration
- Warning symptoms/aura
- Timing/periodicity
- Precipitating/Aggravating factors
- Relieving factors
- Severity
- Progression of symptoms

Associated Symptoms:
- Facial pain/Neck stiffness
- Stress
- Photophobia/Phonophobia
- Nausea/Vomiting
- Blurring of vision/flashing lights
- Fever, rash
- Seizures, Loss of consciousness

History of trauma
Effect on daily activities
Past Medical History
Family History : Migraine/cerebral haemorrhage
Drug History : Beta blockers/OCP
Personal History : Smoking/alcohol/Recreational drugs
Occupational History : job and stresses at work
Ensured understanding of patients problems/concerns
Made a reasoned assessment of patient's problem
Summarised and clarified further actions

Instruction to the actor:

You are Mrs Thompson and you work in a local nursery as a child minder. You are experiencing severe headache for last 6 hrs. Acute onset and this is the worst headache you have ever experienced. You feel sick. There is no fever.

DIFFERENTIAL DIAGNOSIS

CLASSIC MIGRAINE
- Character: throbbing pain
- Location: hemicranial
- Associated: preceded with visual disturbances and less often with hemi-sensory disturbances, hemiparesis, or aphasia
- Associated: photophobia and or phonophobia; tension headache often concomitant
- Aggravated: red wine, nuts, aged cheese, chocolate and caffeine containing beverages

CLUSTER HEADACHE
- Character: excruciating pain often stabbing
- Location: usually near one eye
- Associated: tearing, flushed face, nasal congestion, conjunctival congestion (ANS)
- Risk factor: males affected more than females
- Onset: begins at 20 – 40 years of age
- Attacks last 30 – 90 minutes daily for days and then disappear for months (Headache "vacation")
- Alcohol can precipitate but only during an active cycle, not during "vacations"

SUBARACHNOID HAEMORRHAGE
- Character: full-blown catastrophic headache
- Location: Holocaine
- Duration: continuous
- Associated: photophobia, retinal hemorrhages, nuchal rigidity, Brudzinski's sign, Kernig's sign, obtunded collapse

MENINGITIS
- Headache
- Photophobia
- Fever
- Rash

INCREASED ICP
- HA is severe
- HA occur with coughing, sneezing, valsalva effort
- Associated findings include papilledema, obtunded, focal neurologic signs & symptoms

TEMPORAL ARTERITIS
- Character: throbbing and sharp, burning pain
- Location: focal headache in the temporal or frontal-occipital region
- Onset: gradual and progressive
- Aggravated: headache worse at night and with cold
- Risk: most common in white females > 50 years old
  Associated: weight loss, fever, fatigue, polymyalgia rheumatica, monocular visual loss, jaw pain

TENSION HEADCHE
- Tightness around the hat band area or squeezing or pressure pain
- Both sides of head
- Radiates to and from neck
- Stress physical, mental or environmental triggers are present

Mrs Woodward has been loosing weight over the last 4 months. She says that she has no appetite. Take a history and discuss the diagnosis with the examiner.

HISTORY TAKING: WEIGHT LOSS

Greeting/Introduction
Establishes identity of patient/Rapport
Empathy/checks comfort of patient
Explains purpose of visit
Identifies the topic for discussion
Degree of weight loss
Duration of weight loss
Appetite
Gastrointestinal symptoms
Psychological factors
- d. Preoccupation with body weight/food
- e. Stress at home/work
- f. Self induced vomiting/Excessive exercise

Associated symptoms
- i. Amenorrhoea
- j. Skin rash/Red eyes
- k. Tremor/palpitations
- l. Heat intolerance
- m. Polyuria/Polydipsia
- n. Fever, night sweats, lethargy
- o. Cough, shortness of breath, leg swelling
- p. Low mood, suicidal ideas

Dietary history : Normal diet and eating pattern
Elicits beliefs and concerns
Past Medical History
Drug History : Laxative abuse/Diuretic abuse
Personal history : Smoking/alcohol/recreational drugs
Occupational History : job and stresses at work
Family History
Ensured understanding of patients problems/concerns
Made a reasoned assessment of patient's problem
Summarised and clarified further actions
Thanks the patient

You are 35 yr old, working full time as a receptionist. You have noticed that you're feeling thirsty and have been drinking copious amount of water. You have no problem with heat. Periods are normal. You have a family history of diabetes

? Diabetes

PLAB Right Limited

Other Vignettes for group study

Mr Radcliff is 26 yd old gentleman who got admitted to hospital one week back for loss of consciousness. He had one similar episode 3 months back. While he was in the hospital he has been taking sodium valproate. He is getting discharged from the hospital today. Your consultant has asked you to talk to him about the medication and life style changes he may have to do in future.

ADVICE ABOUT MEDICATIONS AND LIFE STYLE – EPILEPSY

1. Greeting/Introduction
2. Establishes identity of patient / Rapport
3. Empathy/Checks comfort of patient
4. Explains the purpose of visit
5. Elicits beliefs and concerns
6. Establishes patient's understanding of his problem
7. Advice about work
8. Advice about Driving
9. Advice about sports/swimming
10. Advice about Holidays/discos
11. Advice about Recreational drugs/alcohol
12. Precautions at Home (Baths/Locks)
13. Inform people/colleagues
14. Contraception/pregnancy
15. Advice on medicines
    a. Mode of intake
    b. Frequency of dosing
    c. Duration of treatments
    d. Explains likely benefits of treatment
    e. Discusses the side effects
    f. Identifies contraindications
    g. Explains the importance of regular intake
16. Summarized and clarified understanding
17. Offers leaflets
18. Societies/support groups
19. Gives chance to ask questions
20. Thanks patient

Instructions to the actor
Ask following questions
Can I drive?
Can I swim?
How long I need to take this medication?
Is there any side effects?

What is a seizure?

A seizure is a short episode of symptoms/ fits caused by a burst of abnormal electrical activity in the brain. Typically, a seizure lasts from a few seconds to a few minutes.

What is epilepsy?
If one has seizures more than once then it may be epilepsy

What triggers a seizure?

There is often no apparent reason why a seizure occurs at one time and not another. However, some people with epilepsy find that certain 'triggers' make a seizure more likely. These are not the *cause* of epilepsy, but may trigger a seizure on some occasions. Possible triggers include:

- Stress or anxiety.
- Some medicines such as anti-depressants, anti-psychotic medication (by lowering the seizure threshold in the brain).
- Lack of sleep or tiredness.
- Irregular meals which nay cause a low blood sugar level.
- Heavy drinking, or street drugs.
- Flickering lights such as from strobe lighting or video games.
- Menstruation (periods).
- Illnesses which cause fever such as 'flu or other infections

Standby medicine to stop seizures

In most people with epilepsy, seizures do not last more than a few minutes. However, in some cases a seizure lasts longer, and a medicine can be used to stop it. The most commonly used medicine for this is diazepam. This can be squirted from a tube into the persons anus ('rectal diazepam'). This is absorbed quickly into the bloodstream from the rectum and so works quickly.

Driving

By law, people with epilepsy must stop driving. If you have a driving license, you must declare that you have epilepsy to the DVLA (Driver and Vehicle Licensing Authority). They will advise on when it may be possible to resume driving again

Travel

Make sure you have sufficient medication with you for your travels. Long journeys and 'jet-lag' may make you tired and more prone to a seizure. This should not stop you travelling. However, it may be best that someone on the trip is aware of your situation

Medic-alert bracelet

Consider wearing one of these bracelets (or necklets). They give an emergency phone number where details you wish to give about your condition are held. Medic-alert bracelets are often worn by people where emergencies may possibly arise. (For example, people with diabetes, severe allergies, epilepsy, etc). Contact details are given at the end.

Safety

The aim is to anticipate and avoid potential serious injury if you have a seizure. Below are some suggestions, but common sense will prevail in your own personal situation.

- **Heat.** Do not use open fires. Think about the design of the kitchen. A microwave oven is much safer than a conventional oven, hot plate, or kettle. Cooker guards may be advisable for conventional cookers. Always turn pan handles towards the back of the cooker. Take the plate to the pan, not a hot pan to the plate.
- **Water.** Showers are safer than baths. If you do not live alone, tell someone if you are having a bath, turn off taps before you get in, and leave the door unlocked. Keep bath water shallow. Do not bath a baby alone. When you swim, do it with someone else, and not far away from dry ground.
- **Heights.** Make sure there are sufficient guards or rails in any high situation. Consider a rail at the top of your stairs. It is best not to climb ladders.
- **Electricity.** Use electrical tools with power breakers. Fit modern 'circuit breaker' fuses.
- **Sharp furniture.** Safety corners are available to cover sharp edges. Perhaps consider soft furnishings around the home as much as possible.
- **Glass.** Consider fitting safety glass to any glass in doors or to low windows.

Mr Williams is 45 yr old gentleman, referred by his GP because he having difficulties in swallowing. Take a history and discuss the diagnosis with the examiner.

HISTORY TAKING – DYSPHAGIA

1. Greeting/Introduction
2. Establishes identity of patient/Rapport
3. Empathy/checks comfort of patient
4. Explains purpose of visit
5. Identifies the topic for discussion
6. Duration of symptoms
7. Site of food sticking
8. Nature of symptoms: Solids/Liquids
9. Pattern of symptoms
    a. Intermittent/constant
    b. Progression of symptoms
    c. Rapidity of progression
10. Associated symptoms
    a. Coughing/choking during swallowing
    b. Pain during swallowing
    c. Weakness elsewhere/Neurological symptoms
    d. Heartburn/Vomiting
    e. Bulging/gurgling of neck
    f. Repeated chest infections
11. Aggravating/reliving factors
12. Appetite
13. Weight loss: Degree and duration
14. Past Medical History (History of GI reflux)
15. Personal History: Smoking / alcohol
16. Treatment History
17. Family History
18. Ensured understanding of patient's problems/concerns
19. Summarised and clarified further actions
20. Thanks the patient

Mr Steel is 71 yr old who lives with his daughter. He was found unconscious this morning by his daughter. He is now in the intensive care unit under the care of your team. Your consultant asks you to gather detailed history from his daughter.

HISTORY TAKING – LOSS OF CONSCIOUSNESS

Greeting/Introduction
Establishes identity of the patient/Rapport
Empathy/Checks comfort of patient
Explains purpose of visit
Establishes symptom for discussion
Onset/Duration
Preceding symptoms/warning
Precipitating factors
Description of episode (any witness)
Recovery time
Associated symptoms:

a. Fever, Headache
b. Nausea, Vomiting, sweating
c. Chest pain, Shortness of breath, Palpitation
d. Dizziness
e. Weakness of limbs
f. Numbness/sensory symptoms

Post event:

a. Recall
b. Injuries sustained
c. Muscle pains
d. Headache
e. Weakness/paralysis of limbs

Past Medical History:

a. Similar episodes
b. Hypertension/Diabetes
c. Blackouts, Epilepsy
d. Headache/Head injury
e. Cardiovascular illness

Drug History
Personal history; Smoking/alcohol/recreational drugs
Family History
Ensured understanding of patient's problems/concerns
Summarised and clarified further actions
Thanks the patient

Mr O'Brien was admitted to hospital 2 weeks back after suffering coronary syndrome. He is now stable and ready to be discharged. Your consultant has asked you to talk to him and give relevant information about the medications he needs to take on discharge.
List of his current medication

1. **GTN Spray**
2. **Aspirin**
3. **Atenolol**
4. **Simvastatin**

DISCHARGE POST MI – ADVICE ON MEDICINES

2. Greeting/Introduction
3. Establishes identity of patient/Rapport
4. Empathy/Checks comfort of patient
5. Explains the purpose of visit
6. Elicits beliefs and concerns
7. Establishes patient's understanding of his problem
8. Explains reasons for considering treatment
9. Identifies the correct medicines
    a. GTN
    b. Aspirin
    c. Atenolol
    d. Cholesterol reducing drugs
10. Discusses the mode of intake
11. Discusses the frequency of dosing
12. Discusses the duration of treatments
13. Explains likely benefits of treatment
14. Discusses the side effects
15. Identifies contraindications
16. Explains the importance of regular intake
17. Summarized and clarified understanding
18. Gives chance to ask questions
19. Thank patient
20. Overall performance

Instructions to the actor:
Ask about the side effects
How long do I have to take these medications?
What do these medications do?
Why do I have to take several medications?

PLAB Right Limited

MULTIPLE SCLEROSIS

It is a condition which affects the brain, spinal cord and nerves. It damages the covering of nerves called Myelin.

Why does it happen?
The exact cause is not known.

Why me?
It is a difficult question to answer. It can happen to anyone. You have done nothing wrong to bring on the disease. It is just a random bad luck. Please do not blame yourself.

Can it happen to my child?
Risk is there, but I can not quantify the risk.

Can I smoke?
It does not affect the outcome of the disease. But it is always better not to smoke because of various health risks associated with smoking. If you want to quit smoking, I may help you.

Can I drink?
Yes, but in moderation. Like not more than 21 units of alcohol in a week, and you should be alcohol free for at least 2-3 days a week.

Can I become impotent?
Risk is there, but I can not quantify the risk. If this happens, treatment is available. (papaverine injection)

Can I become pregnant?
Yes, but it will be better to consult the neurologist and obstetrician before conceiving.

Will I die?
It is a difficult question to answer. It is too early to predict. We do not know how this disease will progress in future. As you know, every person is a different person, they respond differently to same medicines.

Will I be wheel chair bound?
This is also a difficult question to answer. As you know, the course of the disease is very unpredictable. But many people, they live a very productive life for a very long time.

Is it curable?
No, it is not curable, but it is treatable.

GIANT CELL ARTERITIS

It is a condition in which mostly the blood vessels of the head, neck, face and chest are affected. They become swollen and painful. If the blood vessels of the brain are involved then it can cause a stroke.
If the blood vessels of the heart are involved then it can cause a heart attack.
When it involves the limposol blood vessels, we call it Temporal Arthritis. (Temporal region of the fore head and the sides of the fore head)
Sometimes it affects the blood vessels of the eye which can sudden, irreversible and permanent blindness.

Why is it known as giant cell?
Because abnormal large cells are formed within the blood vessel.

What is the treatment?
To prevent the above mentioned problems, we are going to start high dose steroid.
It is a painkiller and at the same time it reduces swelling of blood vessels.
First we will start with a heavy dose, and then later on when symptoms disappear we may start a low dose of steroid as maintenance.

What is the duration of steroid medicine?
Usually typical duration is 2-3 years, but in some people we may have to give it for life long. We will monitor you from time to time.

What are the side effects of steroids?
As you know all medicines have some side effects, steroids are no exception.
Some of the side effects are -:
Insomnia – it can cause difficulty in sleeping for that reason, its better to take this medicine in the morning hour.
Dyspepsia – it can cause tummy problem, so please take it after eating breakfast. If necessary we will give you medicine for this tummy pain.
Blood Pressure – it can increase the blood pressure. We will monitor your blood pressure regularly. If suppose it is raised, then we will start medication to bring it back to normal level.
Weight Gain – constant, regular, high dose of steroid for a long time is associated with weight gain. So, I will refer you to a dietician for a healthy balanced diet. Gentle and regular exercise will be highly beneficial.
DM – it can raise the blood sugar level. If this happens to you then we will start medicine to control it.

Bone thinning (osteoporosis) – When we take steroid for a long time, it can make the bone thin. This thin bone is known as osteoposotic bone. Thin bones are prone to fracture. In this situation we will give you medicines like poisphosphonate to strengthen your bone.
When you take steroid from outside your own body stops producing steroid. If you miss a simple dose of steroid, your blood pressure can drop dangerously to a low level which can prove fatal. So please make sure that you take medicine on time without any miss.
If you have any vomiting or diarrhoea please come to us, so that we can give steroid through blood vessels.
If you have any infection like chest infection, please come to us because dose may need to be increased.
Please wear bracelet/necklace so that others will know that you're taking steroid. Please inform your GP and Dentist.

GOUT

Gout is a condition in which the level of a chemical substance called uric acid encases in the blood. Uric acid is the end product of many reactions of cells.
Excess of uric acid forms tiny crystals. These tiny crystals get deported into the joint and causes pain and swelling.
Certain foods and medicines like seafood, wine and water tablets; they all increase the level of sp uric acid and brings on the gout attack.
Many stressful conditions like infection, injury, operation etc can also initiate gout attack.

Does it run in family?
Yes, in some cases.

What are the complications?
It can damage joints and kidneys.

What should I do?
Avoid sea food, try to loose weight, do gentle and regular exercise. Do not take water tablets for high blood pressure.
Drink alcohol in moderation that is not more than 21 units in 1 week. 2 or 3 days you should be alcohol free and you should not drink more than 3-4 units of alcohol in a day.
I will refer you to a Dietician for a healthy and balanced diet.

What are treatment options available?
During acute attack, we will give you painkillers like Ibuprofen as with any other painkiller rest is advisable. Splint is required to provide rest.
To prevent further attacks one medicine called allopurinol can be used. This medicine reduces the ss uric acid level. Before giving this tablet we will check your kidney function.

PRE HIV TEST COUNSELLING

Whatever we are going to talk about, normally it is going to be confidential between me and you.
Actually this is a blood test. I will take out the blood from your blood vessel of your arm. This test will tell whether you are HIV negative or positive. It does not give information about AIDS. AIDS is the last terminal stage of HIV. I only will give you the result of the tests. It will take 7-10 days for the results to come.
If suppose the test is negative or positive we will do the test after 3 months to make sure that it is a confirmed result because occasionally it gives a false report.
As you know, no test is 100% accurate.
Until the second test result, avoid sex otherwise practice safe sex.
If the result is positive and it is confirmed, then you must tell your GP, dentist or partner.
Do you have any objection about this?

I do not want to tell my partner.
We strongly advise you to inform your partner. We have one facility called partner notification service, in which after gaining consent from you, on your behalf without mentioning your name. We will contact your wife and we will tell her that she might have been exposed to some disease. In this way, we will do the test on her.

Will I die?
It is a difficult question to answer. It is too early to predict. We do not know how the disease will progress in future.

I heard medicines are available for the HIV.
Yes, medicines are available for treatment but not for cure. These medicines can delay the onset of AIDS. We will monitor you from time to time, because of this reason it is better to tell your GP about HIV status. This will be beneficial in the long term.

ASTHMA DISCHARGE MEDICATION

Basically, there are 2 of 3 medicines for asthma which you have to use at home.
2 of them are in the form of inhaler. The other is tablet which is known as steroid.
The 2 inhalers are (1) steroid inhaler and (2) salbutamol inhaler.
Let me explain the blue inhaler which contains salbutamol. This is a reliever; use it whenever you are short of breath. Use 2 puffs each time. Do not use for more than 4 times or 8 puffs. If you are not relieved of shortness of breath, please come to hospital.
However, it has got side effects as like other medicines. They are palpitation and shakiness of hands.
Let me explain to you how to use an inhaler.
This is the mouth piece; this is the bottom of the canister. Before using it, shake it
Hold the inhaler in this way. Breathe out completely.
Keep this mouth piece in below the front teeth. Make a tight seal around it with the help of lips. The moment when you are about to breath in press the canister, breathe in deeply. Hold your breathe for 10 seconds, and then slowly breathe out. Repeat if necessary.
The second inhaler is a preventer which contains steroid. It is known brown in colour. Use it 2 times a day, 2 puffs each time. After use cleanse your moth to prevent oral thrush.
Please use this inhaler till we say.
The third tablet is a high dose steroid. It is used for 5-7 days. Please take this tablet after breakfast. Rarely S/E are seen with this tablet when used for such a short time.

DIABETIC RETINOPATHY

Optician has referred Mr Benjamin to you as he has noticed some changes in the Retina. Mr Benjamin is a known case of diabetes for the last 16 years. He is 65 years old. Mr Benjamin is anxious. He is having concerns. Please address his concerns.
GP has mentioned that you have got certain changes in the back of your eye. These changes are known as diabetic retinopathy. This is very common in diabetics.
The back of your eye is known as the retina. In the retina, blood vessels are present in diabetics. Blood vessels are affected and new blood vessels are formed. These new bloods are weak and they are prone for rupture. When they rupture, they leak blood. This blood in the eye affects the vision.
These changes are permanent, but we can prevent the progression of and we can prevent the blindness also.
To prevent blindness of disease progression, we have to tightly control the diabetes. At the same time controlling blood pressure along with cholesterol is equally important.

We will monitor your cholesterol and blood pressure; if necessary we will give you medicine.
I will refer to your diabetic nurse; she will teach you how to monitor your blood sugar level. Also, your GP will organise blood tests every 6 months to monitor your diabetes.

I will also refer you to an eye specialist who will take a photograph o the back of your eye. This will be done annually.
If some abnormality is there at the back of the eye, treatment is available. This treatment is done by lasers.

FEBRILE CONVULSION

This is fits that occur due to high temperature.

Why him?

This is difficult to answer. It can happen to any child, through genetic plays a role.

Will if affect the growth of the child?

No, not at all

Can attacks occur again?

Chances are there. If he has fever he may have fits. Whenever he is having a temperature, please give him paracetemol tablets. Keep the surrounding cool, please do liquid sponging

Can it cause damage?

No, but if it persists for more than 30 minutes then chances of brain damage are there.

What should I do during attacks?

Do not panic. Be cool and calm. Fits do not cause pain and discomfort to the baby. Do not interfere with the fits

COELIAC DISEASE

The gut reacts abnormally with gluten. Gluten is a protien which is present in rye, wheat, oat, and barley. The gut thinks that gluten is a harmful substance and reacts to it like reaction to infection from organisms like bacteria or virus. Due to this inflammatory reaction the small tube like projections present in the lining of the gut, called villi, which are responsible for absorption, are lost and absorption of food is affected.

Why does it happen?

The exact cause is not known. But is triggered due to sensitivity to Gluten

Can it happen to his brother?

Will affect the growth of my child?

A gluten free diet will ensure normality and development.

Which foods should be avoided?

Coke, pasta, bread. I will refer him to a dietician and they will be able to tell you in more detail. Gluten free food products are available in almost all supermarkets.

Can he eat gluten occasionally?

No, not even the smallest amount of gluten in his life time.

What are the complications?

Complications only occur when gluten free diet is not maintained. Below are the following complications-:

1. Anaemia
2. Thinning of bone
3. Failure to thrive

What is a gastroscopy?

A gastroscopy is test to look into the upper part of your gut. The upper gut consists of the oesophagus (gullet), stomach and duodenum.

An endoscope is a thin, flexible, telescope. It is about as thick as a little finger. The endoscope is passed through the mouth, into the oesophagus and down towards the stomach and duodenum. The tip of the endoscope contains a light and a tiny video camera so the operator can see inside your gut.

The endoscope also has a 'side channel' down which various instruments can pass. These can be manipulated by the operator. For example, the operator may take a small sample (biopsy) from the inside lining of the stomach by using an thin 'grabbing' instrument which is passed down a side channel.

What happens during a gastroscopy?

Gastroscopy is usually done as an outpatient 'day case'. It is a routine test which is commonly done. The operator may numb the back of your throat by spraying on some local anaesthetic. You may be given a sedative to help you to relax. You lie on your side on a couch. You are asked to put a plastic mouth guard between your teeth. This protects your teeth and stops you biting the endoscope. The operator will then ask you to swallow the first section of the endoscope. Modern endoscopes are quite thin and easy to swallow. The operator then gently pushes it further down your oesophagus, and into your stomach and duodenum. A gastroscopy does not usually hurt, but it can be a little uncomfortable, particularly when you first swallow the endoscope.

What preparation do I need to do?

- You should not eat for 4-6 hours before the test. The stomach needs to be empty. (Small sips of water may be allowed up to two hours before the test.)

Are there any side-effects or complications from having a gastroscopy?

Most gastroscopies are done without any problem. Some people have a mild sore throat for a day or so afterwards. Occasionally, the endoscope causes some damage to the gut. This may cause bleeding, infection, and rarely, perforation. If any of the following occur within 48 hours after a gastroscopy, consult a doctor immediately

Lifestyle treatments to lower high blood pressure

Blood pressure is the pressure of blood in your arteries (blood vessels). Blood pressure is measured in millimetres of mercury (mmHg). Your blood pressure is recorded as two figures. For example, 150/95 mmHg. This is said as '150 over 95'.

High blood pressure is a 'risk factor' for developing a cardiovascular disease (such as a heart attack or stroke), and kidney damage, sometime in the future. If you have high blood pressure, over the years it may do some damage to your arteries and put a strain on your heart. In general, the higher your blood pressure, the greater the health risk. But, high blood pressure is just one of several possible risk factors for developing a cardiovascular disease.

Lifestyle treatments to lower high blood pressure

Lose weight if you are overweight

Losing some excess weight can make a big difference. Blood pressure can fall by up to 2.5/1.5 mmHg for each excess kilogram which is lost. Losing excess weight has other health benefits too.

Regular physical activity

If possible, aim to do some physical activity on five or more days of the week, for at least 30 minutes. For example, brisk walking, swimming, cycling, dancing, etc. Regular physical activity can lower blood pressure in addition to giving other health benefits. If you previously did little physical activity, and change to doing regular physical activity five times a week, it can reduce systolic blood pressure by 2-10 mmHg.

Eat a healthy diet

Briefly, this means:

- AT LEAST five portions, and ideally 7-9 portions, of *a variety of* fruit and vegetables per day.
- THE BULK OF MOST MEALS should be starch-based foods (such as cereals, wholegrain bread, potatoes, rice, pasta), plus fruit and vegetables.
- NOT MUCH fatty food such as fatty meats, cheeses, full-cream milk, fried food, butter, etc. Use low fat, mono-, or poly-unsaturated spreads.
- INCLUDE 2-3 portions of fish per week. At least one of which should be 'oily' such as herring, mackerel, sardines, kippers, pilchards, salmon, or *fresh* (not tinned) tuna.
- If you eat meat it is best to eat lean meat, or poultry such as chicken.
- If you do fry, choose a vegetable oil such as sunflower, rapeseed or olive oil.
- Low in salt.

A healthy diet provides benefits in different ways. For example, it can lower cholesterol, help control your weight, and has plenty of vitamins, fibre, and other nutrients which help to prevent certain diseases. Some aspects of a healthy diet also directly affect blood pressure. For example, if you have a poor diet and change to a diet which is low-fat, low-salt, and high in fruit and vegetables, it can lower systolic blood pressure by up to 11 mmHg.

Have a low salt intake

The amount of salt that we eat can have an effect on our blood pressure. Government guidelines recommend that we should have no more than 5-6 grams of salt per day. (Most people currently have more than this.) Tips on how to reduce salt include:

- Use herbs and spices to flavour food rather than salt.
- Limit the amount of salt used in cooking, and do not add salt to food at the table.
- Choose foods labelled 'no added salt', and avoid processed foods as much as possible.

Restrict your number of caffeine drinks

Caffeine is thought to have a modest effect on blood pressure. It is advised that you restrict your coffee consumption (and other caffeine-rich drinks) to fewer than five cups per day.

Drink alcohol in moderation

A small amount of alcohol (1-2 units per day) may help to protect you from heart disease. One unit is in about half a pint of normal strength beer, or two thirds of a small glass of wine, or one small pub measure of spirits. However, too much alcohol can be harmful.

- Men should drink no more than 21 units of alcohol per week (and no more than four units in any one day).
- Women should drink no more than 14 units of alcohol per week (and no more than three units in any one day).

Cutting back on heavy drinking improves health in various ways. It can also have a direct effect on blood pressure. For example, if you are drinking heavily, cutting back to the recommended limits can lower a high systolic blood pressure by up to 10 mmHg.

Lifestyle - in summary

It is estimated that dietary and exercise interventions discussed above can reduce blood pressure by at least 10 mmHg in about 1 in 4 people with high blood pressure.

Mr Rutherford is 40 yr old suffers from severe anemia. Advise him about blood transfusion

Greeting, Introduction

I have come to discuss about the possible need to transfuse blood

Understand patient's knowledge and concerns

Can you please tell me any concerns that you may already have

Explain

Anaemia means reduced number of red blood cells. Red blood cells carry oxygen around the body. It is now important to transfuse the blood to maintain circulation of blood and oxygen transport

Transfusion is given through a small plastic cannula (plastic pipe) in a vein in your arm. The transfusion should not be painful but having a cannula in your arm may be a little uncomfortable. Each unit of blood is usually transfused over two to four hours.

Before a transfusion is given, the blood of the donor and the recipient must be tested against each other to ensure they are compatible.

Risks

There are rare instances when a reaction might occur due to very rare minor blood group incompatibilities. There is a very low chance of getting an infection from donated blood, because blood is very carefully checked. All blood donors are unpaid volunteers who are very carefully screened and tested to make sure that the blood they donate is as safe as possible.

CFS/ME
Chronic Fatigue Syndrome / Myalgic Encephalomyelitis

Mrs Smith is 46 yr old lady. She has been feeling tired for more than a year. All investigations are normal; your consultant has reached the diagnosis of Chronic Fatigue Syndrome. Explain this to Mrs Smith

Greeting, Introduction

I have come to discuss about the results of the tests

Understand patient's knowledge and concerns

Can you please tell me any concerns that you may already have

Explain
We have now reached a diagnosis of Chronic Fatigue Syndrome. All tests done were normal. Unfortunately there is no test to confirm this condition.
The cause of CFS/ME is not known. There are various theories - but non are proved. A popular theory is that a virus infection may trigger the condition

Treatment: Graded exercise

Graded exercise means a gradual, progressive increase in aerobic activities such as walking or swimming. It is based on the theory that a factor that helps to maintain the illness is inactivity, with subsequent physical 'deconditioning'. A very gradual increase in the level of exercise is thought to help to reverse this process. Some research studies showed that, on average, people with CFS/ME improved with a structured programme of graded exercise compared to those who did not have this treatment.

Chronic Kidney Disease/ Chronic Renal Failure

Greeting, Introduction
Understand patient's knowledge and concerns
Can you please tell me any concerns that you may already have?

What is chronic renal failure?

Chronic kidney disease (CKD) means that your kidneys are diseased or damaged in some way and as a result may not work properly. So, the various functions of the kidney, can be affected. Healthy kindneys have a number of fuctions. They are concerned with removal of wastes and toxins from the body by filtering the blood and production of urine. It is also involved in maintaining the balance of water and different salts in the body.
A number of conditions can cause permanent damage to the kidneys and/or affect the function of the kidneys and lead to CKD. The common causes are high blood pressure, diabetes and inflammation.

What are the symptoms?

In the early stages patients often do not have any symptoms. However, symptoms in the late stage could include tiredness, swollen ankles and feet, poor appetite, feeling sick, shortness of breath and sometimes blood in the urine.

Treatment

The treatment will include treatment of underlying condition and also preventing or slowing down the progression of the kidney disease.

- Control of blood pressure and blood sugar
- Alert doctors before taking any medication as certain drugs can be harmful
- Cholestrol lowering tablets may be needed
- Stopping smoking
- Regular exercise
- Regular record of weight
- Vaccination : annual flu jab and one off pneumococcal vaccine.

Fluid intake:
One of the major functions of the kidney is balance of water in the body. In CKD there is risk of fluid overload and this can be minimized by regulating the fluid intake. The daily intake is different for different patients and depends on the amount of urine that one produces. The chronic kidney nurse will help us to get this balance right.

Healthy diet
Healthy and nutritious diet is a very important part of management and should be well balanced in carbohydrate, proteins and salt. We need to get the right balance of protein and I will put you in touch with the renal dietician who will be able to guide you further in this. Salts like potassium can increase in the body when the kidney cannot dispose these. Therefore it would be important to cut down on potassium rich food like bananas, crisps, chocolate, baked beans etc. Kidneys are also important for bone health and their balance of other minerals also becomes important.

Dialysis
Dialysis is an artificial method of removing toxins. If the kidneys fail, their functions to an extent can be replaced by dialysis. Not everyone needs dialysis and blood tests will be done regularly to monitor the situation. There are two different types of dialysis
1. Haemodialysis where blood is cleaned outside the body by a machine. One needs to come to the hospital usually three items a week. (haemodialysis specialist nurse)
2. Peritoneal dialysis : blood is cleaned inside the body. This can be done, at home or at work . (Peritoneal dialysis nurse)

PLAB Right Limited

DOSE CALCULATION :

GOLDEN POINTS

- 3 types of questions can be asked viz.,
  - Calculation only.
  - Calculation and preparation of the solution.
  - Insulin preparation.

- In the calculation only questions, If you get a decimals in your answer, you can leave it as that because you are not going to prepare the solution.
- For the second type of questions, calculate for 24 hours if you get a decimal point in your answer then calculate for 30 HOURS, to avoid decimals.

And then you can discard 6 mls of the total prepared solution.

1. FENTANIL

Weight of the patient is 25KG
Required dose is 4 microgram/hr/kg
1 ml of Fentanil is 500 microgram

A. Make a solution to administer one ml/hr for 24 hours
B. How much normal saline is there in your prepared solution

Calculation:

Step 1:
Calculate the amount of drug needed for 24 hours
24 hrs × req dose in micrograms × wt of the patient
24 × 4 × 25kg =2400 micrograms/24 hrs.

Step 2:
Convert to ML
If 1 ml contains 500 microgram of Fentanil, how much ml is needed to get 2400 microgram

1ml	500 microgram
?	2400 microgram

Required Drug is (?) =2400 × 1 ÷ 500 = 4.8 ml.

Step 3:
Second question is : For 24 hrs how much of normal saline should be added to the solution.

We need 24 ml of the solution to administer 4.8 ml of the drug over 24 hrs. We need to dilute the drug using saline to make it up to 24ml.

24 – 4.8ml = 19.2 ml.

We need 19.2 ml of saline to dilute the drug to make a 24ml of solution.

Step 4
(only if you get a decimal point in the answer like above, if not go straight to step 5)

Now calculate for 30hrs to make a solution for 30 hrs instead of 24 (We can discard the excess of 6ml from the prepared solution at the end)

Follow the same steps from 1- 3. The new answer is 6ml of Fentanil and 24 ml of saline.

If you get a decimal point in the answer for 30hrs of administration, then go to step 6

Step 5
Preparation:
1. Write the label
2. Wash your hands
3. Wear non sterile gloves
4. Get all equipments
5. Check expiry date of the drug
6. TAKE 30 ml Syringe
7. Draw the amount of drug
8. Dilute by adding normal saline to make it to 24ml
9. Stick the label, discard the waste to sharps/ yellow bin appropriately

Step 6

Preparation when you have a decimal point in the amount of drug to be taken

Preparation:
1. Write the label (write the amount of drug, that you have calculated for 24 hrs)
2. Wash your hands
3. Wear non sterile gloves
4. Get all equipments
5. Check expiry date of the drug
6. TAKE 30 ml Syringe
7. Draw the amount of drug nearest to the decimal
8. Use a one ml syringe to draw the fraction
9. Add the content of 1ml syringe to 30ml syringe
10. Dilute by adding normal saline to make the solution to 30ml
11. Discard the 6ml to kidney tray
12. Stick the label; discard the waste to sharps/ yellow bin appropriately

2.PETHIDINE

Weight of the patient is 12 kg
Required dose is 15 micro grams /kg/hr
Concentration of the drug is 1 ml = 0.5 mg

A. Make a solution at one ml/hr for 24 hours ?
B. How much normal saline is there in your prepared solution?

Drug = 24 hrs × req dose in micrograms × wt of the patient
= 24 × 15 × 12kg =4320 micrograms/24 hrs.

Answer: 8.64 ml.

3 PETHIDINE

Weight of the patient is 10 kg
Required dose is 15 micro grams /kg/hr
1 ml = 500 micro grams

A. Make a solution at one ml/hr for 24 hours ?
B. How much normal saline is there in your prepared solution?
ANSWER =7.2 ml.

4. MIDAZOLAM
WEIGHT OF THE PATIENT is 40 KG
REQUIRED DOSE is 20 micro grams /kg /hr
1 ml = 1 mg.
A. Make a solution at one ml/hr for 24 hours ?
B. How much normal saline is there in your prepared solution?

5. Morphine
Weight of the patient is 3 kg
Required dose is 60 micro grams /kg /hr
1 ml = 10 mg.
A. Make a solution at one ml/hr for 24 hours ?
B. How much normal saline is there in your prepared solution?

6. Morphine

Weight of the patient is 3 kg
Required dose is 20 micro grams /kg /hr
1 ml = 10 mg.

A. Make a solution at one ml/hr for 24 hours ?
B. How much normal saline is there in your prepared solution?

7. Midazolam
Please prepare a solution of Midazolam for Mr Smith. He should be given 0.5 mg of Midazolam per hour. Prepare solution at one ml/hour for 24 hours
Concentration is 1 ml = 1 mg.

INSULIN

Question:
Weight of the patient is 40 kg
Required dose is 0.05 units /kg /hr
1 ml of insulin is = 4 units

A. Make an insulin infusion for 5 hours .

Step 1:
Calculate required units of insulin

5 hrs × required dose in units × wt of the patient
5 × 0.05 × 40 kg =10 units.

Step 2:

Calculate the amount of insulin
1 ml = 4units ;
10 units = 2.5 mls of insulin.

Step 3:
Write label, wash your hands and check expiry date.
Take an appropriate syringe and put needle. First take out the 2.5 ml of solution from the 500ml bag. Discard that syringe and needle. Take another set of syringe and needle. Inject 2.5 mls of insulin to the 500ml bag.

Special notes:

If concentration of the drug or insulin (1ml = xxmg) then please look at the drug vial, it will contain that information

In case of insulin, if the concentration is not given on the vial as well, then please use the unit syringe.

PLAB Right Limited

Orthopedics					
Knee Joint Examination					
Hip Joint Examination					
Shoulder Joint Examination					
Hand Examination					
Spine Examination					
Ankle Examination					
Surgery History					
Abdominal Examination					
Examination of fall outstretched arm					
Hematuria					
PR Bleeding					
PAIN IN RIGHT UPPER QUADRANT					
Lower abdominal Pain					
Urinary Retention					
Testicular Pain					
Hemetemesis					
Assessment for day case surgery					
Intermittent Claudidation					
Ulcer on the back					
Surgery Counselling					
Vasectomy					
Colonoscopy					
Hernioraphy					
Appendicectomy					
TURP					
Irritable Bowel Syndrome					
Hemicolectomy					
Testicular Lump					
Endoscopy					
Telephone Conversation					
Post Operative infection					
Cancellation of surgery due to obesity					
Cancellation of surgery due to anaemia					
MRSA					
Nephrectomy					
Dysphagia: Seen in medicine					
Total Hip Replacement					
Total Knee Replacement					

PLAB Right Limited

SURGERY

ABDOMINAL EXAMINATION.

1. Greeting/Introduction.

2. Establishes identity of the patient/rapport.
3. Empathy/checks the comfort of the patient.
4. Explains purpose of visit/nature of exam.
5. Takes consent for examination.
6. Appropriate exposure.
7. Go to the foot end of the bed.
8. Inspect the abdomen for ;
    a. Skin changes/ Pigmentation
    b. Hair distribution
    c. Distension
    d. Swelling
    e. Scars
    f. Stomas
    g. Movement with respiration
    h. Umbilicus and its shape and any discharge
    i. Dilated veins
    j. Gynecomastia
9. Then examine the hands for:
    a. Clubbing
    b. Splinter haemorrhages
    c. Erythmea
    d. Sweating
    e. Dupurtyren Contracture
    f. Pigmenattion
    g. Koilonychias
    h. Leuconychia
    i. Radial pulse
10. Then examine the face and mouth for :
    a. Pallor
    b. Jaundice cyanosois
    c. Spider naevi
    d. Parotid swelling
    e. Angular stomatitis
    f. Glossitis
    g. Oral hygiene
    h. Oral ulcers
11. Then ask the patient if they are sore anywhere and if so where palpate their last. Bend down to the level of the abdomen. Begin superficial palpationand palapte all nine areas of the liver. Then perform deep palpation in all nine areas.
12. **Palpate Liver**. Ask patient to breathe deeply . Place your hand below the right costal margin. As the patient breathes in move your hand up the abdomen and attempt to feel the liver as the patient breathes out. If Liver is felt this indicates hepatomegally so begin percussing the right chest until percussion note changes from resonant to dull. Then measure and state the liver span.

13. **Palpate Spleen.** Begin deep palpation in the right iliac fossa all the way upto the left flank you can also ask patient to roll towards you slightly making aplaption of this organ easier if enlarged.
14. **Palpate Kidneys.** Place one hand behind the kidney and attempt to push it up while feeling for it with the other hand placed just below the costal margin laterally. Do for both sides.
15. **Palpate** for any impulses.
16. **Percuss** ALL NINE QUADRANTS.
17. Check for shifting dullness.
18. **Auscultate** for bowel sounds place stethoscope over the ileocecal valve area and listen .
19. **Say** you would like to complete the examination by examining the hernial orifices as well as the external genitalia and perform a digital rectal examination.
20. Thank and cover the patient.

EXAMINATION OF FALL ON OUT STRECHED HAND.

1. Greeting/Introduction.
2. Establishes identity of the patient/rapport.
3. Empathy/checks the comfort of the patient.
4. Explains purpose of visit/nature of exam.
5. Takes consent for examination.
6. Appropriate exposure.
7. Find a pillow to make patient more comfortable if possible
8. **Look for the following:**
    a. Lacerations
    b. Deformity
    c. Bruising
    d. Under surface of elbows
9. **Feel for the following:**
    a. Temperature
    b. Tenderness- feel from the top down starting at the clavicle working down towards the hand
    c. Ulnar deviation
    d. Vascular status of upper limb including capillary refill
10. **Move :**
    a. Ask patient to push thumb against the palm of the normal hand
    b. Ask patient to bend their fingers for you
11. **X-rays:** 3 views ask for scaphoid view and bone scan and CT if necessary.
12. **Cast:** Some casts may be present choose the one that covers the thumb and starts just below the elbow, shaped in the glass holding position. Will be worn for six weeks approximately.
13. **Advice:**
    a. Keep the hand elevated by wearing a sling
    b. Keep the fingers moving
    c. Give painkillers for pain
    d. If the fingers swell and there is pins and needle sensation come to hospital immediately. Compartment Syndrome.
14. Thank the patient for cooperation.

In Plab, in orthopaedics examination, please examine the affected joint only. There is no role for tone, power and reflex.
All lower limb examination begins with gait examination.
Gait – It is a style of walking
Gait appears to be normal or gait appears to be abnormal.

Always examine joint line in flexion.
Always begin palpation by checking the temperature first.
Always palpate the tender area in the last

Hematuria –
Introduction:
Open Question:Can you tell me more about this problem?
Duratuion: Since how, have you had this problem?
Onset: Did it start suddenly? Did any thing significant happened around the time? (truma)
Progress> Is it increasing day by day?
Nature of the symptom

Colour? Frequency, through the stream, beginning or end
Is it mixed with the water? Is it painful or painless? Any clots?

DD
UTI – Do you have fever?
Ureteric colic – Do you have pain on the side of tummy?
Cancer bladder – How is your appetite? Have you lost any weight?
Have you noticed any lumps anywhere in the body?
Bleeding problem – Do you bleed from elsewhere?
Medical history – Do you have any medical illness?
Surgical history – Have you had any operations in the past?
Medicine – Are you taking any medicine?
Family history – Is there any disease which runs in your family?
Is there any one in your family who had similar problem?
Social history – What is your occupation? With whom do you live?
Do you smoke? Do you drink alcohol? Are you able to manage your daily routine activity? Do you want to tell me anything more?

Past Medical History
Medications, Allergies, hospital admissions and surgeries

PR BLEEDING
Introduction:
Open Question:Can you tell me more about this problem?
Duratuion:
Onset: Did it start suddenly?
Progress> Is it increasing day by day?
Nature of the symptom

Colour? Fresh? Does it get flushed easily?
Quantity? Is it mixed with stool?
Consistency
Associated with pain

DD
IBD – Do you have tummy pain? Have you noticed any slime in your stool?
Anal pressure – Do you feel pain when you open your bowel?

Piles – Do you stain your toilet tissue?
Cancer – Do you have incomplete sensation of evaluation? How is your appetite? Have you lost any weight? Have you noticed any lumps or bumps in your body?
Medical history – Do you have any medical illness?
Surgical – Have you had any operation in past?
Drug history – Do you take any medicine?
Family history – Is there any disease which runs in your family?
Is there any one in your family who had similar problem?
Social history – What is your occupation? With whom do you live? Do you smoke? Do you take alcohol? Are you able to manage daily routine activity? Have you been abroad any time?
Do you want to tell me anymore?

Past Medical History
Medications, Allergies, hospital admissions and surgeries

PAIN IN RIGHT UPPER QUADRANT
Introduction:
Open Question:Can you tell me more about this problem?
Duratuion:
Onset: How did it start? Any thing happen at the time? (Trauma)
Progress> Is it increasing day by day?
Nature of the symptom

Severity 0-10
Character of the pain (Sharp, Dull)
Continues or episodic
If episodic what brings it on?
Site and Radiation
Aggravating and reliving factors

Associated symptoms:
Vomiting, Nausea, diarrhoea, Constipation, loss of appetite, Fever

DD
CHOLECYSTITIS – Do you have any shoulder tip pain?
Is it related to eating fatty foods? Does the pain increases on breathing in?
Ulcer – Does the pain become less after eating? Have you noticed any black coloured stool?
Hepatitis – Have you vomited? Do you any itching of the skin?
Pneumonia – Do you have any fever?
Cancer – How is you appetite? Have you lost any weight? Have you noticed any lumps and bumps in your body?
Medical history – Do you have any medical illness?
Surgical history – Have you been operated any time?
Drug history– Are you taking any medicine?
Family history – Is there anyone in the family who is having similar problem?
Social history – What is your occupation? With whom do you live? Do you smoke? Do you take alcohol? Are you able to manage your daily routine activity?
Do you want to tell me anything more?

Past Medical History
Medications, Allergies, hospital admissions and surgeries

LOWER ABDOMINAL PAIN

Introduction:
Open Question:Can you tell me more about this problem?
Duratuion:
Onset: How did it start? Any thing happen at the time? (Trauma)
Progress> Is it increasing day by day?
Nature of the symptom

Severity 0-10
Character of the pain (Sharp, Dull)
Continues or episodic
If episodic what brings it on?
Site and Radiation
Aggravating and reliving factors

Associated symptoms:
Vomiting, Nausea, diarrhoea, Constipation, loss of appetite, Fever

DD
Common Causes
Appendicitis,
Constipation
Irritable bowel syndrome
Diverticulitis,
Lower ureteric stones,
urine tract infection,
Bladder infection or cystitis,
Obstruction
Think of the following in addition to the above in female patients
Pelvic inflammatory disease,
Ectopic pregnancy,
endometriosis,
Fibroids,
Polycystic ovarian syndrome. Torsion of ovary
Think of the following in Male patients in addition to the above list of common causes
Epidydimus
Testicular Torsion

UEINARY RETENTION

Introduction:
Open Question:Can you tell me more about this problem?
Duratuion:
Onset: How did it start? Sudden or gradual
Progress> Where you finding it difficult to pass water? For how long? How did this problem progress?

BHP
Frequency – How many times do you pass water?
Nocturnal frequency – Do you wake up at night to pass water?
Urgency – Do you have to rush to toilet once you get the urge?

Urge incontinence – Have you passed water before reaching toilet?
Stress incontinence – Do you pass water when you cough?
Stream – How is your flow? Do you dribble at the end?
Hesitancy – Do you have to wait on the toilet to pass water?
Dysuria – Do you have any pain when passing water?
Medical history – Do you have any medical illness?
Surgery – Have you had any surgery in past?
Drug history– So you take any medicine?
Family history – Is there any disease which runs in your family? Is there anyone in the family who is having similar problem?
Social history – What is your occupation? With whom do you live? Do you smoke? Do you take alcohol? Are you able to manage your daily routine activity?
Do you want to tell me anything more?

Past Medical History
Medications, Allergies, hospital admissions and surgeries

TESTICULAR PAIN
Introduction:
Open Question: Can you tell me more about this problem?
Duration:
Onset: How did it start? Any thing happen at the time? (Trauma)
Progress> is it increasing day by day?
Nature of the symptom

Site, both sides?
Severity 0-10
Character of the pain (Sharp, Dull)
Continues or episodic
If episodic what brings it on?
Site and Radiation
Aggravating and reliving factors

Associated symptoms:
Vomiting, Nausea, diarrhoea, Constipation, loss of appetite, Fever

DD
TESTICULAR TORSION: Do you have tummy pain? Have you vomited?
UTI – Do you have discharge down below? Do you have pain while passing water?
Strangulated hernia – Do you have constipation? Do you have distension of tummy?
Cancer of testis – How is your appetite? Have you lost any weight? Have you noticed any lumps or bumps in you body?
Medical history – Do you have any medical illness?
Drug history – Do you take any medicine?
Surgical history – Have you had any surgery in past?
Family history – Is there any disease which runs in your family? Is there anyone in the family who is having similar problem?
Social history – What is your occupation? With whom do you live? Do you smoke? Do you take alcohol? Are you able to manage your daily routine activity?
Do you want to tell me anything more?

Past Medical History
Medications, Allergies, hospital admissions and surgeries
HEMATEMESIS / MALINA
Introduction:
Open Question: Can you tell me more about this problem?
Duration:
Onset: How did it start? Did any thing cause the problem?
Progress>
Nature of the symptom

Melina: Colour? Fresh? Does it get flushed easily?
Quantity? Is it mixed with stool?
Consistency
Associated with pain
Hemetemesis:
Colour? Quantity, Associated with pain?

DD
HEPATITIS: Have you had any blood transfusion in the past? Have you had any operation in the past? Do you take any recreational drug? Have you ever shared any needle? Do you have any tattoos?
Cirrhosis – Do you have any tummy distension?
Ulcer – Do you have any tummy pain? What is the colour of your stool?
Cancer - How is your appetite? Have you lost any weight? Have you noticed any lumps or bumps in you body?
Medical history – Do you have any medical illness?
Drug history – Are you taking any medicine?
Surgical history – Have you had any surgery in past?
Family history – Is there any disease which runs in your family? Is there anyone in the family who is having similar problem?
Social history – What is your occupation? With whom do you live? Do you smoke? Do you take alcohol? Are you able to manage your daily routine activity?
Do you want to tell me anything more?

Past Medical History
Medications, Allergies, hospital admissions and surgeries

Assessment for day case surgery – Pre anaesthetic

Assessment of 3 questions

1. How is your general health?
2. Any problems with your heart or chest?
3. How is your bowel? How is your bladder? How is your appetite
4. Have you been hospitalised in any hospital, at anytime, for any reason?
5. Did you have anaesthesia in the past
6. Was there any problem during anaesthesia?
7. Is there anyone in your family who has had any problem during anaesthesia?
8. Do you have any medical illness? If yes – Since how long has it been controlled?
9. Do you take any medicines? If yes – Since how long have you been taking?
10. Are you allergic to any medicine?
11. Do you smoke?
12. Do you take alcohol?

13. How far is your house from hospital?
14. Who will look after you for the first 24 hours?
15. Do you have a telephone at home?

INTERMITTENT CLAUDICATION

Introduction:
Open Question: Can you tell me more about this problem?
Duration:
Onset: How did it start?
Progress> is it increasing day by day?
Nature of the symptom

Site, both sides?
Severity 0-10
Character of the pain (Sharp, Dull)
Continues or episodic
If episodic what brings it on? How long can you walk before getting the pain
Aggravating and reliving factors

DD

TAO: Do you have pain at rest? Do you get relief from pain after taking rest? Do you have any ulcer in your leg?

BUERGER'S DISEASE:
Neurogenic cause – Do you have back pain? Do you have pain in the buttocks and back of thigh? Do you have weakness in your leg?
Trauma – Have you injured yourself?
Cellulitis – Do you have a fever?
Medical history – Do you have any medical illness?
Drug history – Are you taking any medicine?
Surgical history – have you been admitted to hospital any time?
Family history – Is there any disease which runs in your family? Is there anyone in the family who is having similar problem?
Social history – What is your occupation? With whom do you live? Do you smoke? Do you take alcohol? Are you able to manage your daily routine activity?
Do you want to tell me anything more? Thank you

Past Medical History

Medications, Allergies, hospital admissions and surgeries

WOMEN WITH ULCER IN BACK

Introduction:
Open Question: Can you tell me more about this problem?
Duration:
Onset: How did it start? Any significant event (Trauma, injury, burns)
Progress
Nature of the symptom

Site, Size, Shape, Colour, Discharge,
Pain?
Is it regular?
Is it spreading?

DD
Infection – Do you have any fever? Have you noticed pus from the ulcer?
Skin cancer (SCC/melanoma) – Have you had any sun burn in the past? Do you use sun beds? Do you have any skin problem?
Trophic ulcer – Have you been immobilised for a long time? Do you have any medical illness? Are you taking medicine?

I am going to examine you. I will take swab from the ulcer to see which bug is present and Lansing the ulcer.
We will take some cells also for biopsy to know whether cells are normal or abnormal.

VASECTOMY
This is a permanent procedure. This is a minor procedure. It is done under local anaesthesia in which we will numb the area above the testis by injection. Duration of this procedure is about 10-15 minutes. We will put incision above the testis. Then we will cut the sperm tube which is known as vasdeferus and we will tie the both ends of the tube.
You are not going to be sterile immediately after the procedure. We will check your semen for sperms on two occasions, after 3 and 4 months. If there is no sperm in the semen on both occasions then we will declare you sterile.
This procedure does not affect virility. If patient asks, then only answer this question.
Reversal of the procedure can be done but results are extremely poor.
Complication – Pain, infection, injury to surrounding structure.
Do you want to ask me anything? Thank you

COLONOSCOPY
What do you know about it? This is a painless procedure. This is a camera test. This is simple routine procedure. This is done under sedation. Before the procedure, we will prepare your bowel by giving medicine 2 days before. Medicine is a laxative.
In this procedure, we will pass gas from back passage to distend the tummy so that visualization will be easy. We will pass one tube with camera through the back passage and we will see inside your tummy or bowel.
The duration of this procedure is about 10-20 minutes. Rarely may we not be able to see the bowel properly, and then we will repeat it on a later date.
If we see any abnormal growth, then we will take tissue biopsy.
Complication – You may bleed for a day or two if biopsy is taken. Bleeding is usually very small in quantity. Very rarely perforation of the bowel.
Precaution – For the first 24 hours please do not drive, do not drink alcohol and do not work near machinery.

HERNIORRAPHY
Hernia is an abnormal protrusion of an organ through normal or abnormal opening.
In your case it is coming out though tummy wall and is containing small portion of bowel.
This procedure is done under general anaesthesia in which we will put you to sleep. Duration of operation is 20-30 minutes. It is done by keyhole surgery. Three small hooks will be made on the tummy. One at the belly button and two at the lower tummy. Through one hole at the belly button we will put gas to distend the tummy, so that we can see the inside of the

tummy clearly. Through other holes at lower tummy, we will put instrument. We will push the content of the hernia back in the tummy and we will reinforce the tummy wall by putting one mesh.
You will wake up in the recovery room.
Complication – Pain, bleeding, infection, injury to surrounding structure.

Appecndicectomy:

Understand the concerns, and the knowledge they already have
Explain about the appendicitis (If needed) Appedicitis is inflammation of appendix. The appendix is a small pouch that is connected to the colon (large intestine) and is located in the lower right side of the abdomen. The inflamed appendix will have to be surgically removed in a procedure known as an appendectomy.
Explain only that is relevant (Question may tell if it is laparoscopic or conventional. If the question do not specify then you will have to decide on the method.
Traditional appendectomy, will be required in the following conditions

- where the appendix has burst
- people who have tumors
- women who are in the first of pregnancy
- people who have had repeated previous abdominal surgery and may have adhesions

Laparoscopy
We will make a number of small incisions in your abdomen, through which the we will insert a small tube that contains a light and a tiny video camera (a laparoscope).
This allows us to see the inside your abdomen in great detail without having to make a large incision. The appendix can then be removed through the incisions.
The advantage of a laparoscopic appendectomy is that it leaves minimal scarring and the recovery time is a lot quicker. Most people having a laparoscopic appendectomy will be able to leave hospital a few days after the operation, although it may be one to two weeks before you fully recover.

Traditional appendectomy
A traditional appendectomy will leave a larger scar about 4 – 6 inches long and it may be a week before you are well enough to leave hospital. The procedure will include removal of the inflamed appendix.

Complications
Peritonitis
Abscess
Bleeding
Pain and Infection

IRRITABLE BOWEL SYNDROME
All results are encouraging, but it does not mean that you do not have any problem. We have come to a diagnosis called IBS. What do you know about it? There is No test which can confirm IBS. It is a condition in which people get tummy problem. Exact cause is not known. However stress is closely linked to this condition. It is a treatable disease but not curable. As I told you the exact cause is not know, so there is no exact treatment for IBS.
Simple measures can help you a lot. They are -:

1. Do gentle and regular exercise
2. Eat healthy and balanced diet

3. Keep an eye on food which causes problem
4. For pain – We give antispasmodics for diarrhoea – anti motility drugs.
5. Attend stress management courses

It does not cause Cornell, IBD and colitis.
Do you have any questions? Thank you

HEMICOLECTOMY

As you know that you have got cancer of the bowel. For this reason we are going to open your tummy, and then we will take out the portion of bowel which contains the cancer. Before the operation, we will prepare your bowel by giving you medicine and laxative.
This is a major operation and is done under general anaesthesia in which we will put you to sleep. Duration of operation is 1-2 hours.
In this operation we have decided to perform one procedure called colostomy. What do you know about it?
In this operation, we will attach the upper end of the bowel to the front of the tummy wall skin. The opening on the skin is called stoma. This colostomy can be permanent or temporary. It depends on the patient's condition.
This stoma is an artificially _____ back passage on the front of the tummy. Instead of passing stool from the back passage, you will pass your stool from this stoma.
We will give you stoma bag which has been allocated to the stoma. In this stoma bag stool will be collected. Initially you may need to change it frequently, but later on you will get used to it and you will change it once or twice a day. Now a day, stoma bags are colourless and odourless. You can perform almost all activities with it. Our Stoma nurse will tell you more about it.
What can I eat? You can eat anything, but keep an eye on food which causes problem.
Can I play football? Please avoid playing any contact sports.
Can I go abroad? Yes
What about winds – Avoid eating foods which can cause wind formation like peas, onion etc.
Any precaution – Contact us whenever there is bleeding from the stoma. Severe abdominal pain and vomiting several times.
Reversal of operation – We may do it after 3-4 months if everything is fine. This operation is easy to perform and takes less time to recover.

TESTICULAR LUMP

On examination, I found a lump in the testis. This lump can be harmless or sinister. At the moment it is a clinical finding. Now we are going to do the scan of the testis to know whether it is arising from testis or separated from the testis.
If it is separated from the testis and cystic then is a harmless condition. Then we may do surgery if it gives you pain or cosmetic reason.
If it is arising from the testis and solid in consistency then it can be sinister. Then we will do some blood tests which will measure hormone levels. Hormones are chemical substance and we will take out the testis for the biopsy to know whether cells in the testis are normal or not. It is important to take the testis because of the fear of spillage of abnormal cells else where in the scrotum. If cells are abnormal, then we will refer you to a specialist doctor.
Can I be a father of a child? Yes
How is the prognosis? Excellent if treated in the initial stage.

ENDOSCOPY

This is a routine camera test in our hospital. This is a painless test and done under sedation. Please do not eat anything 4 hours before the test. You will lie on the couch on your side and a mouth guard will be applied so that you will not brush the tube. This test sees the inside of the tummy and food pipe. The duration of this test is about 10-20 minutes. If some abnormal areas are present then we will take biopsy. Complications are rare but I am duty bound to tell you.

1. Bleeding – In small amount if biopsy is taken for a day or two
2. Perforation very rarely

Precaution – Do not drink alcohol and or drive for first 24 hours. Do not work near machinery.

TELEPHONE CONVERSTAION

Your communication skills witll be assessed in this station. Examiner will look for clarity of the information provided and structure. This station can also turn in to viva station and examiner can ask you some questions about the management. Do not assume anything. Just provide the information given and explain what you would like to do next.

Hello, may I speak to on call surgeon Dr_____. I am Dr_____. I am sorry to bother you. Are you busy at the moment? I am going to talk to you about one patient.
The name of the patient is _____ and he is _____ years old. He came to hospital with pain in abdomen along with distension and vomiting. He is having painful lump in the groin. Most probably he is having intestinal obstruction secondary to strangulated hernia. He is conscious at the moment vitals are stable.
On examination – he has generalised destention of tummy, exaggerated bowel sounds, no rigidity and guarding.
I will request for full blood count, x-ray erect abdomen and USG of the time and ordered for cross matching.

Management

NBM, NG tub, 2 wide bore cannula, fluids, monitoring vitals after every 15 minutes, applied catheter, maintaining input/output chart, informed on call anaesthetist and theatre staff along with surgical registrar. Informed the patient about his condition. Do you want me to do anything? Please come and see the patient? Thank you

POST OPERATIVE INFECTION MANAGEMENT

I will admit you and I will examine you. I will take a swab from the wound and send it to the lab to know which bug is causing it and we will give you the right appropriate antibiotic. At the same time we will remove sutures and when infection heals, then we will take you to operation theatre and we will put another new suture.

POST OPERATIVE INFECTION MANAGEMENT

As you know pain after surgery or operation is of high intensity because of this reason we are not going to use Brufen or Brufen like painkillers. In your case, we will give you codeine. codeine is a member of opoid group and quite effective in controlling post operative pain. However, it can cause constipation along with drowsiness and dryness of mouth. But this disappears after some time. Suppose, if this pain does not disappear or becomes less then we may have to use morphine. what do you now about morphine? Morphine is a painkiller and belongs to opoid family. I do not want morphine? Why? I am a teacher. morphine is an excellent painkiller if taken in the right amount. Can I become addicted? No. We are using a small dose for a short period, so chances are less.
If this is not working, then we will give you morphine through syringe pump called patient controlled analgesia.
In this syringe morphine is kept and through a small tube morphine is injected inside the skin. Whenever patient is feeling pain he can switch on the syringe and relieves a constant dose. This is a highly effective method of pain relief. Usually almost all patients get pain relief by this method.

TOTAL KNEE REPLACEMENT: In this station, you may be asked to explain the procedure and its complications and benefits to the patient and thus take an informed consent. Or, you may be asked to talk to the patient and address his/her concerns about the procedure, its complications, duration of stay in the hospital, precautions to take after the operation, etc.

Procedure: It is a major operation. An incision is given on the front of the knee and the worn out joint surfaces of the thigh and shin bone are resurfaced with metal or plastic. It is done under general anaesthesia, in which we shall be putting you to sleep. One of my anaesthetic colleagues will come and discuss the complications of anesthesia with you. All being well, the procedure should not take more than one and a half hour.

Complications:

1. Pain: You can have some pain after the procedure, but please don't worry, we shall give you a combination of painkillers immediately after the procedure so that you don't feel any pain.
2. Wound infection: Rarely, the wound may become infected. But, please don't worry, our surgeons use sterile techniques. And even if it does happen, we shall give you antibiotics to relieve the infection.
3. Bleeding: Rarely, there could be bleeding from the wound site. Our surgeons are very competent. They shall manage any such complication if it does arise.
4. Injury to surrounding structures.
5. Clots in legs and lungs (DON'T MISS THIS COMPLICATION): There is always a risk of development of clots in legs and lungs after such surgeries. But, we shall give you blood-thinning medications, give you compression stockings to wear and shall mobilize you as soon as possible after surgery in order to minimize the risk.

After the procedure: The physiotherapist will visit you on the same day of the operation and shall help you sit up in bed. He may also help you walk with a Zimmer frame. It is very important to mobilize you after surgery. It improves blood circulation and reduces the risk of formation of clots.

When will you discharge me? It all depends on how you recover after the operation. When you are able to bend your operated knee to 90 or more than 90 degrees; and when we are sure that you can walk independently with support and take care of yourself at home, my Consultant shall discharge you. But usually, it is about 3-5 days.

Precautions at home:

1. Avoid high-impact sports like football, hockey, etc. You can swim though.
2. Do not kneel on your knees.
3. Take measures to reduce swelling of the knee by using ice packs (ice cubes packed in a towel), compression stockings and elevation of leg (do twice a day for 5 mins – by placing a few pillows beneath the foot).
4. Do exercises taught by physiotherapist regularly.

When can I go to work? Enquire about nature of work first! Adequate rest is very important. Sedentary work can be started after a rest of 4-6 weeks. A longer duration of rest is required otherwise.

When can I drive? Give time for recovery. When you are comfortable you can make an emergency stop, you can drive. But avoid driving for 4-6 weeks. We shall be able to tell you better about this in your future follow-up appointments.

Follow-up: After two weeks.

Removal of sutures: One to two weeks, at GP Surgery.

TOTAL HIP REPLACEMENT: Replacement of diseased head of thigh bone and hip socket with an artificial hip joint, which is made up of either metal or plastic.
HEMIARTHROPLASTY: Replacement of just the diseased head of thigh bone with an artificial head. The hip socket is not replaced.
In this station, you may be asked to explain the procedure and its complications and benefits to the patient and thus take an informed consent. Or, you may be asked to talk to the patient and address his/her concerns about the procedure, its complications, duration of stay in the hospital, precautions to take after the operation, etc.
Procedure: This is a major operation, which is done under general anaesthesia. An incision is given on the side of hip and the diseased hip joint replaced with an artificial one. One of my anaesthetic colleagues will come and discuss the complications of anesthesia with you. All being well, the procedure should not take more than one and a half hour.
Complications:

1. Pain: You can have some pain after the procedure, but please don't worry, we shall give you a combination of painkillers immediately after the procedure so that you don't feel any pain.
2. Wound infection: Rarely, the wound may become infected. But, please don't worry, our surgeons use sterile techniques. And even if it does happen, we shall give you antibiotics to relieve the infection.
3. Bleeding: Rarely, there could be bleeding from the wound site. Our surgeons are very competent. They shall manage any such complication if it does arise.
4. Injury to surrounding structures.
5. Clots in legs and lungs (DON'T MISS THIS COMPLICATION): There is always a risk of development of clots in legs and lungs after such surgeries. But, we shall give you blood-thinning medications, give you compression stockings to wear and shall mobilize you as soon as possible after surgery in order to minimize the risk.

After the procedure: The physiotherapist will visit you on the same day of the operation and shall help you sit up in bed. He may also help you walk with crutches. It is very important to mobilize you after surgery. It improves blood circulation and reduces the risk of formation of clots. Early mobilization and physiotherapy also helps to strengthen the muscles of the legs.
When will you discharge me? It all depends on how you recover after the operation. When we are sure that you can walk independently with support and take care of yourself at home, my Consultant shall discharge you. But usually, it is about 7-10 days.
Precautions at home:

1. Do not bend the hip beyond an L position.
2. Do not twist on your operated leg.
3. Do not cross your legs.
4. Do not squat.
5. Do exercises taught by physiotherapist regularly.

When can I go to work? Enquire about nature of work first! Adequate rest is very important. Sedentary work can be started after a rest of 4-6 weeks. A longer duration of rest is required otherwise.
When can I drive? Give time for recovery. When you are comfortable you can make an emergency stop, you can drive. But avoid driving for 6-8 weeks. The occupational therapist shall arrange for any necessary arrangements to the driving seat. We shall be able to tell you better about this in your future follow-up appointments.
Follow-up: After two weeks.
Removal of sutures: One to two weeks, at GP Surgery.

RADICAL NEPHRECTOMY: Removal of the kidney, the adrenal gland, the tube connecting the kidney to the water-bag and other tissues around the kidney.
Procedure: This is a major operation, which is done under general anaesthesia. An incision is given on the side of belly and the diseased kidney and the surrounding tissues removed. One of my anaesthetic colleagues will come and discuss the complications of anesthesia with you. All being well, the procedure should not take more than one and a half hour.
Complications:

1. Pain: You can have some pain after the procedure, but please don't worry, we shall give you a combination of painkillers immediately after the procedure so that you don't feel any pain.
2. Wound infection: Rarely, the wound may become infected. But, please don't worry, our surgeons use sterile techniques. And even if it does happen, we shall give you antibiotics to relieve the infection.
3. Bleeding: Rarely, there could be bleeding from the wound site. Our surgeons are very competent. They shall manage any such complication if it does arise.
4. Injury to surrounding structures.

OPERATION CANCELLED DUE TO OBESITY: In this station, you shall be asked to tell the patient that his surgery is unlikely because he is overweight. Inform the patient of the complications that surgery can pose in an overweight person and tell him about measures to take to lose weight.
Surgery is safer and more effective for people with a healthy weight. Patients who are overweight are much more likely to suffer serious, sometimes life-threatening, complications as a result of surgery.
- Serious breathing problems
- Infections
- Heart, kidney and lung complications
- Longer recovery - meaning more time in hospital
- A higher risk of dying whilst under anaesthetic

A small weight loss can reduce these risks dramatically. The more you lose the better it will be for your long term good health. You will reduce the risk of
- Diabetes
- Heart disease
- Stroke
- Cancer
- Dying early

Measures to take: Referral to **DIETICIAN** for advise on proper diet containing less fat. Also, referral to **PHYSIOTHERAPIST** for advise on exercise.

OPERATION CANCELLED DUE TO ANAEMIA: In this station, you shall be asked to tell the patient that his operation has been cancelled because he has been found to be anemic. Ask him if he knows what anaemia is? Anaemia is lack of pigment in the blood which we called haemoglobin. Haemoglobin carries oxygen to tissues, so anaemia is decreased oxygen carrying capacity of blood.

Risks of surgery in an anaemic patient:
1. All surgeries carry a risk of bleeding. Any bleeding during surgery will put an unusual load on the heart and cause severe complications. This could be life-threatening as well.
2. Delayed wound healing.
3. High risk of infection.

It is important to correct the anaemia before operating on you.
Can't this anaemia be corrected by blood transfusions? Well, we shall have to find the cause of this anaemia first. And we shall treat the cause. And for that, we shall have to carry out some investigations.

MRSA Infection: The scenario usually given in the exam is of a lady who has had a C-section and whose surgical wound has been found to be infected with MRSA (known as Superbug). You shall be asked to address her concerns.
Beware: This lady is quite distressed. Make sure you are very clear and convincing in what you say.
Where did I get this infection from? This bug is present on the skin and nostrils in normal people. Normally, it does not cause any infection. It can cause infection in patients who have underwent surgery and who have an open wound, as in your case. (MRSA can also cause infection in patients who have been admitted in the hospital for a long time, elderly patients and particularly in those patients who are immunocompromised.)
Will I die? There is no reason why we may not be able to treat you successfully. This is a potentially curable infection. This superbug is not more virulent than other bugs. It is just resistant to the common antibiotics. We shall have to use stronger antibiotics to kill this bug and that means you shall have to stay in

the hospital for a longer period of time. Plus we shall have to keep you in a special isolated room where you shall receive special care.
Can my family visit me? As long as your family members are healthy, they can visit you. Children, if healthy, can attend as well.
Can I hold my baby? Yes. As long as your little one is healthy, you can hold him.
Can I breastfeed my baby? Unfortunately, you cannot. We shall be giving you strong antibiotics and there is a risk they may pass on to your baby in breast milk and cause problems to him.

TURP:
Transurethral resection of the prostate (TURP) is a surgical procedure that involves cutting away a section of the prostate gland.
The prostate is a small gland located between the water-pipe and the water-bag, and surrounds the water-pipe. When this gland enlarges, it constricts the water-pipe and cause problems.

Procedure: A TURP is usually performed using a spinal anaesthetic (epidural) so you will be awake but you will lose all feeling below your waist and will feel no pain.

During the procedure the surgeon will insert a thin metal wire with a loop at the end into your water-pipe and up against your prostate. An electric current heats up the loop which cuts away a section of the prostate.

Recovery: Most men can leave hospital in 2-3 days after surgery and resume most normal activities within 1 week.

However, it can take up to 6 weeks before you are fit enough to return to work if your job is physically strenuous.

Complications: Besides pain, wound infection, bleeding, the other important complications are retrograde ejaculation and urinary incontinence.
A common disadvantage is that men lose the ability to ejaculate semen out of their penis during sex or masturbation, although they still have the physical pleasure associated with ejaculation (the climax). This is known as retrograde ejaculation and can occur in as many as 9 out of 10 cases.
Another common disadvantage is that men lose their ability to control their water-bag (urinary incontinence), although this usually passes a few weeks after surgery.

TESTICULAR LUMP: In this station, you shall be asked to talk to a patient with a testicular lump. You may be given the clinical findings in the station and asked to talk to the patient about further management.

Beware: This patient is naturally distressed because of the testicular lump, therefore, talk clearly and convincingly. Be empathic.

We have found a lump on examination. The lump can be hamless or sinister. At the moment, it is a clinical finding. Now we are going to do a TV scan of the testis to know whether it is arising from the testis or separated from the testis.

If it is separated from the testis and solid in consistency, then there is a chance that it could be sinister. We shall do some blood tests to check for any rise in tumor markers. Tumor markers are chemicals in the blood which can be raised in the presence of a tumor.
If tumor markers are found to be raised, then unfortunately, we shall have to remove the testis by operation and send it to the pathologist for biopsy. The pathologist shall confirm whether the cells of the testis are cancerous or not. If cells are found to be cancerous, then we shall have to refer you to a cancer doctor.

Is it important to remove the testis? Yes. If our suspicion of cancer is strong, we shall have to remove the testis. Otherwise, the cancer could spread to other areas of the body.

Can I be a father of a child? As long as your other testis is fine, you shall have no problems.

Will I be cured? Testicular cancer is a completely curable cancer if in treated in early stage.

HERNIORRAPHY:

Hernia is an abnormal protrusion of bowel through a defect in the tummy wall. Herniorraphy is a surgical procedure in which we give an incision on the hernia, push the bowel back into the tummy and place a mesh over the defect which reinforces the tummy wall. All being well, the procedure should not take more than 30 minutes.

Complications:

1. Pain: You can have some pain after the procedure, but please don't worry, we shall give you a combination of painkillers immediately after the procedure so that you don't feel any pain.
2. Wound infection: Rarely, the wound may become infected. But, please don't worry, our surgeons use sterile techniques. And even if it does happen, we shall give you antibiotics to relieve the infection.
3. Bleeding: Rarely, there could be bleeding from the wound site. Our surgeons are very competent. They shall manage any such complication if it does arise.
4. Injury to surrounding structures.

When can I go to work? Enquire about nature of work first! Adequate rest is very important. Sedentary work can be started after a rest of 2-3 weeks. A longer duration of rest (4-6 weeks) is required otherwise. IT IS BETTER TO STOP STENUOUS WORK ALTOGETHER FOR FEAR OF RECURRENCE OF HERNIA.
When can I have sex? Give time for the wound to heal. When you have recovered enough and are comfortable, you can have sex. Give a few weeks for rest and recovery.
When can I drive? Give time for recovery. When you are comfortable you can make an emergency stop, you can drive. But avoid driving for 3-4 weeks.
Other advice: Avoid constipation. Take more fruit and vegetables.
When will you remove the mesh? Removal of mesh is not required. The mesh is there to reinforce your tummy wall and prevent recurrence of hernia.

PLAB Right Limited

PERIPHERAL VASCULAR EXAM

1. Greeting /Introduction.
2. Establishes identity of the patient.
3. Empathy/ Ensures comfort of patient.
4. Explains purpose of the visit/nature of the examination.
5. Takes consent for examination.
6. Appropriate exposure.
7. Chaperone.
8. Again following steps must be performed in both legs.
9. **INSPECTION.**
    a. Skin Changes.
    b. Hair changes.
    c. Swellings.
    d. Pigmentation.
    e. Varicose veins.
    f. Scars.
    g. Temperature.
    h. Ulcers.
    i. Nails.
    j. Capillary refill.
10. Then check the temperature of both legs and compare them .
11. **Ask about any soreness in the calves and check for tenderness to rule out DVT !.**
12. **Dorsalis Pedis Pulse**- felt lateral to the to the extensor hallucis longus best felt at the proximal extent of the groove between the first and second metatarsals. Comment whether they are palpable and compare both sides. Do this for all pulses.
13. **Posterior Tibial Pulse**- felt 2cm below and posterior to the medial malleolus .
14. **Popliteal Pulse**- feel in the popliteal fossa and say that you are unable to appreciate the popliteal pulse. This is because if it is palpable then it is an aneurysm unless proven otherwise.
15. **Femoral Pulse**- felt midway between the anterior superior iliac spine and the pubic tubercle. Before doing so warn them that you are going to feel their groin area and then ask them if it is ok to do so.
16. Check for radio-femoral delay.
17. Check for radio-radial delay.
18. **Radial pulse** should be taken quickly comment on rate, rhythm, volume, and character.
19. **Berger's Test**
    k. First of all confirm that there is no soreness in the patients legs.
    l. Raise a leg and hold it at the angle of 45 ° and hold till the superficial veins have collapsed and the leg goes white.
    m. Then place the leg at the side of the couch in a dependent position and observe for an intense rubor indicating peripheral vascular disease.
20. Palpate the abdomen and auscultate to rule out abdominal aortic aneurysm.
21. Auscultate the femoral arteries as well for bruit.
22. Then auscultate the heart all four areas and the carotid arteries.
23. Then check the power of the limbs.
24. Check sensation of the limbs.
25. Finish by saying that you would like to know the claudication distance as well as the Ankle Brachial Pressure Index and that you would also like to perform a Doppler scan.
26. Thank and cover up the patient.

65 yr old Mrs Smith had suffered coronary syndrome 2 yr back. Now she is getting breathless. Examine the cardio vascular system

CARDIOVASCULAR EXAM

1. Greeting/Introduction.
2. Establishes identity of the patient/rapport.
3. Empathy/checks the comfort of the patient.
4. Explains purpose of visit/nature of exam.
5. Takes consent for examination.
6. Asks for chaperone.
7. Appropriate exposure.
8. Start at the foot end of the bed.
9. **INSPECTION.**
    - **a.** Scars on chest or the leg indicating any bypass surgery.
    - **b.** Check the chest is moving with respiration.
    - **c.** Chest deformity.
    - **d.** Any visible apex beat.
    - **e.** Pallor.
    - **f.** Cyanosis.
    - **g.** Malar flush.
    - **h.** Clubbing.
    - **i.** Splinter haemorrhage.
    - **j.** Janeway lesions/Oslers Nodes
    - **k.** Palmar erythmea.
    - **l.** Sweating .
    - **m.** Capillary refill.
    - **n.** Peripheral /Sacral edema.
10. Take the radial pulse comment on rate, rhythm, volume, character.
11. Then ask if patient is sore before checking for the presence of a collapsing pulse by holding the patients arm at the wrist and then lifting the arm. If it collapses indicates Aortic Regurgitation.
12. Then mention that you would like to take their Blood Pressure standing and lying if possible.
13. Then ask the patient to turn their head to left and look at the JVP and mention whether it is raised or not.
14. Ask if they are sore in the chest anywhere at all.
15. Then palpate the apex beat by using the palm of the hand and then localise it with three fingers then one finger. Mention if it's a tapping or displaced beat. Also mention the location of the apex beat with reference to the intercostals space and anatomical lines. By counting down the intercostals spaces from the angle of louis. Often located in the fifth intercostals space in the midclavicularline.
16. Palpate for any thrills by placing the palmar surface of hands on the chest.
17. Palpate for any ventricular heave by palpating along the sternal lateral borders using the ulnar border of the hand.

18. Auscultate all four areas.
    o. Mitral Area -Apex beat.
    p. Tricuspid Area -Left sternal edge 4th intercostals space.
    q. Pulmonary Area -Left sternal edge 2nd intercostals space.
    r. Aortic Area -Right sternal edge 2nd intercostals space.
    s. Comment on S1 and S2 in all four areas by timing sounds with the radial or carotid pulse.also comment on any added heart sounds.
    t. Roll the patient to the left and listen at the apex using the bell to detect the mid-diastolic and pre-systolic murmur of mitral stenosis.
    u. Sit the patient up and forwards and then ask patient to breathe out fully and hold their breath. Then listen over the right second intercostals space and over the left sternal edge with the diaphragm for murmur of aortic incompetence.
19. Auscultate the carotids.
20. Ausculate the lung bases and also check for sacral edema so as to avoid moving patient too much.
21. Palpate the liver for enlargement.
22. Check for aortic abdominal aneurysm.
23. Examine peripheral pulses.
24. Thank and cover up the patient.

Instruction to the actor.

1. You are breathless and uncomfortable. If the doctor asks for oxygen accept it.
2. Follow the instructions given by the candidate only if it is clear and you can understand it easily.
3. If candidate hurts you while doing the examination you need to scream to bring this to the examiner's attention.

44 Yr old Mr Jones is in your clinic. Examine his lymphoreticular system

EXAMINATION OF LYMPHORETICULAR SYSTEM

Greeting/Introduction
Establishes identity of the patient
Empathy/checks comfort of patient
Explains purpose of visit/nature of examination
Asks patient to undress
Asks for a chaperone
Takes consent for examination
General signs:
- a. Pallor
- b. Jaundice
- c. Purpura/bruising
- d. Lymphedema
- e. Temperature

Skin for scratch marks, ulceration
Checks for Bony tenderness
Mouth:
- a. Tounge
- b. Gum bleeds
- c. Oral ulcers
- d. Tonsils

Lymphnodes : palpates all groups systematically
- a. Cervical
- b. Supraclavicular
- c. Axillary
- d. Epitochlear
- e. Inguinal
- f. Popliteal

Abdomen
- a. Liver
- b. Spleen
- c. Ascitis

Testis
Overall approach to the task
Thanks the patient

Instructions to the actor

1. Follow the instructions given by the candidate only if it is clear and you can understand it easily.
2. If candidate hurts you while doing the examination you need to scream to bring this to the examiner's attention.

34 Yr old Mr Hopkins has come to A& E because he is feeling unwell. Examine the respiratory system and report the findings to the examiner

RESPIRATORY EXAMINATION.

1. Greeting/Introduction.
2. Establishes identity of the patient/rapport.
3. Empathy/checks the comfort of the patient.
4. Explains purpose of visit/nature of exam.
5. Takes consent for examination.
6. Asks for chaperone.
7. Appropriate exposure.
8. Start at the foot end of the bend and comment on the following:
    v. Shape of chest
    w. Any deformities
    x. Scars/Sinuses
    y. Lumps
    z. Rate of respiration
    aa. Mode of respiration
    bb. Pattern of respiration
    cc. Use of accessory muscles of respiration
    dd. Symmetrical movements with respiration.
9. Then go to the hands:
    ee. Clubbing
    ff. Cyanosis
    gg. Wrist pain
    hh. Muscle wasting
    ii. Flapping tremor- ask patient to extend the wrists as far back and hold them there.
    jj. Nicotine staining
    kk. Pulse BP JVP
10. Check for pallor, icterus, cyanosis and edema.
11. Then before starting palpation check for any soreness.
12. Palpate for any crepitus.
13. Palpate the trachea checking whether it is approximately central it deviates to the right slightly this is normal.
14. Check the chest expansion in upper and lower zones. Upper zone - observe the clavicles from behind during tidal breathing. Lower zone – place your hands firmly on the chest wall with fingers extending around the sides of the chest. Your thumbs should meet in the midline and lifted slightly off the chest so they are free to move with respiaration. Ask patient to take a deep breath, your thumbs should move symmetrically apart at least 5 cm.
15. Check for vocal fremitus by placing hand on the chest at the upper level then ask patient to say "99" then place hand on the left side. Compare both sides and then repeat for the middle and lower zones as well.
16. Palpate the cervical, supraclavicular,infraclavicular and axillary lymph nodes.
17. Percuss the anterior of the chest above the clavicle on the clavicle directly and down the chest along rib walls alternating between right and left comparing percussion note.

18. Then percuss the liver span.
19. Then ask the patient to sit up with arms crossed and hands placed on the shoulders.
20. Repeat the above 14,15 and 17 for the back this is done top minimise the movement of the patient for their comfort and to save you valueable time.
21. Auscultate the front and the back .
22. Vocal resonance- in the same place you auscultate for breath sounds repeat but ask the patient to say 99.
23. Look for sputum pot, inhalers.
24. Mention need to perform PEF.
25. Thank and cover the patient.

Instructions to the actor

1. You are breathless and uncomfortable. If the doctor asks for oxygen accept it.
2. Follow the instructions given by the candidate only if it is clear and you can understand it easily.
3. If candidate hurts you while doing the examination you need to scream to bring this to the examiner's attention.

Mr Anderson has been complaining of pins and needles in his right leg. He is a diabetic and is on insulin. Examine his foot.

EXAMINATION OF DIABETIC FOOT

Greeting/Introduction
Establishes identity of the patient
Empathy/Checks comfort of patient
Explains purpose of visit/nature of examination
Asks patient to undress
Asks for a chaperone
Takes consent for examination
Inspection:
- a. Claw toes/ Pes Cavus
- b. Callus formation
- c. Ulcers/Gangrene
- d. Looks for ulcers between toes
- e. Skin , nails and hairs

Feels for temperature
Peripheral Pulses
Sensations
- a. Fine touch
- b. Pin prick
- c. Vibration
- d. Joint position

Assessment of Gait
Assessment of Motor functions
Assessment of reflexes
Checks suitability of footwear
Overall approach to the task
Thanks the patient

Instructions to the actor

1. Follow the instructions given by the candidate only if it is clear and you can understand it easily.
2. If candidate hurts you while doing the examination you need to scream to bring this to the examiner's attention.

45 yr old Mrs Scott has been complaining of weight gain and unable to tolerate cold. Examine her thyroid gland.

1. Greeting/Introduction
2. Establishes identity of patient/Rapport
3. Empathy/Checks comfort of patient
4. Explains purpose of visit/Explains procedure
5. Takes consent
6. Privacy/Chaperone
7. Loosens clothing around the neck
8. Comments on pulse
9. Examines hand:
    a. Clubbing
    b. Sweating/palmer Erythema
    c. Tremor
10. Examines Eyes:
    a. Proptosis (from behind)
    b. Lid retraction/Lid Lag
    c. EOM for Opthalmoplegia
11. Inspects Neck (front & sides) scars, swelling
12. Inspects movement on swallowing
13. Inspects movement on protrusion of tongue
14. Palpation: Does it correctly/competently
    a. Feels for temperature
    b. Confirms movement on swallowing
15. Percussion
16. Auscultates for bruits
17. Comments on Lymph nodes
18. Feels trachea
19. Tests ankle jerks
20. Assesses speech/cough
21. Describes findings correctly
22. Thanks patient
23. Overall performance

Instructions to the actor

1. Follow the instructions given by the candidate only if it is clear and you can understand it easily.
2. If candidate hurts you while doing the examination you need to scream to bring this to the examiner's attention.

TRAUMA AND ORTHOPAEDICS

Table of content

1-INTRODUCTION ON JOINT EXAMINATIONS

To be systematic we follow the following sequence for all orthopedic examinations.

Look-this is inspection of the joint. We look from the front, side and the back. We comment on any of our positive findings. However if there are no positive findings we also mention the absence of some of the findings. For example there is no swelling, no bruising etc.

Feel-here we feel for the temperature and palpate for tenderness.

Move- both passive and active.

Special test-any special test that examines the particular joint.

Function- range of function.

REMEMBER

Examine the affected joint only.
There is no role for tone, power and reflex.
All lower limb examinations begin with gait examination.
Gait – it is a style of walking.
Gait appears to be normal or gait appears to be abnormal.
Always examine the joint line in flexion.
Always begin palpation by checking the temperature first.
Always palpate the tender area last.

2-HIP JOINT

LOOK

Obvious deformity or scars
One joint above and one joint below
Inspect the spine
Pt Supine: Leg Length discrepancy
Muscle bulk and symmetry

FEEL

Leg length discrepancy
Anterior Superior iliac spine
Illac crest
Pubic symphysis
Greater Trocanter
Sacrum
Femur

MOVE
Flexion
Extension
Adduction
Abduction
Internal and external rotation

TESTS
Trendelenberg's test
Thomas Test

FUNCTION
Walk

Prepare yourself
Wash your hands and explain to the patient what you are doing today. Expose patient's legs and hips while keeping underwear on. Ask patient if they have any pain.

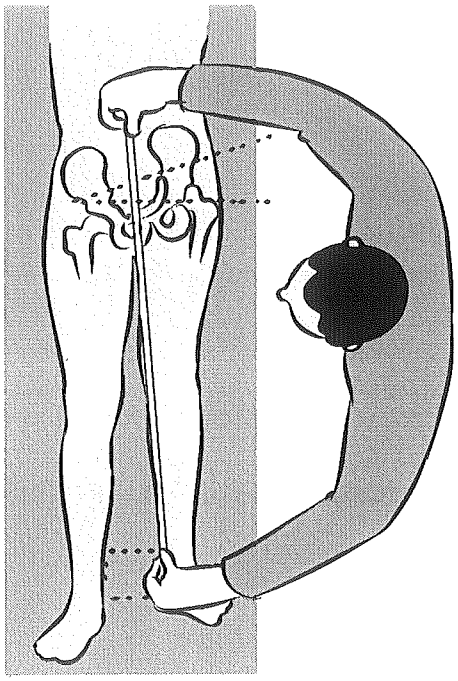
Look

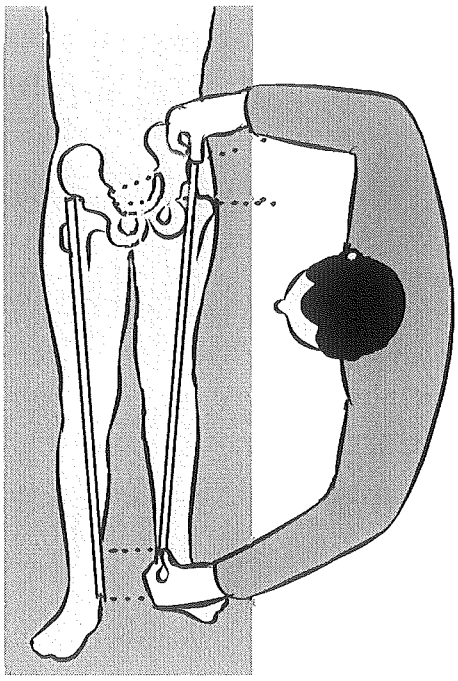
- Look *around the bed* for any aids or adaptations such as a walking stick or wheel chair.
- Ask the patient to *walk* for you. Comment on his *gait*. Gait can be antalgic, limping, Trendelenberg's or perhaps waddling.
- From *the front* look for scars, pelvic tilt, quadriceps wasting. Comment that there is no swelling, deformity or scar marks.
- From *the side* look for lumbar lordosis. It could ether be normal, loss of lordosis or hyperlordosis.
- From *the back* look for gluteal wasting, scoliosis and any sinus or scars.
- Ask the patient to lie on the couch with the legs straight and feet held together. Look for shortening of the leg.

Feel

- For *temperature*. Comment that 'the temperature appears to be normal'.
- *Bony Points* – 'I am going to feel your hip joint'. Feel – Iliac crest, ASIS, pubic symphysis, greater trochanter, head of femur
- True *leg length discrepancy* is found by measuring from the anterior superior iliac spine to inferior margin of medial malleolus.
- Apparent leg length discrepancy is measured from xiphisternum or umbilicus to medial malleolus.
- Tenderness in the *greater trochanter* will suggest the patient has trochanteric bursitis
- Tenderness in the *lesser trochanter* could be due to strain in the illiopsoas muscles. To feel the lesser

Apparent Method › externally anc True Method ɔw the medial third of inguinal ligament.



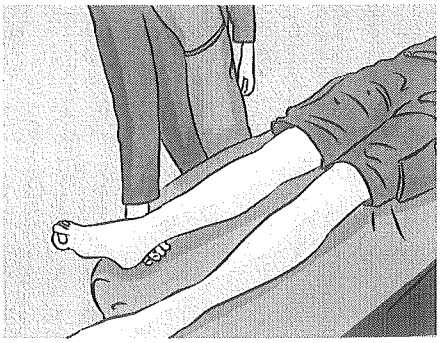


Move

- 'I am going to do some manoeuvres on your hip joint'. Do flexion, extension, and abduction, and adduction, external and internal rotation.
- *Flexion-* Keep the patient in the supine position. Keep one hand under the patient's lumbar spine. Bend the knee joint, and then bend the hip joint completely until it briefly touches the abdomen.
- *Extension-* Ask the patient to lie on their chest. Stabilize the hip joint. Keep the leg straight without bending the knee joint, and lift the leg in the air. Normally; you are able to lift in the air a little. (0-10 degrees)

Flexion

Extension



- *Abduction*-Stabilize the pelvis by putting your thumb over ASIS. Keep the leg straight without any bending at the knee joint. Now abduct the hip joint until ASIS moves. When ASIS moved, it means the abduction is over or finished.
- *Adduction-*_Keep the patient in the supine position. Stabilize the pelvis by keeping the thumb over the ASIS. Keep the leg straight without bending at the knee joint. Move the leg medially across the body and over the other leg, until ASIS moves.
- *Internal and external rotation* – Bend hip and knee at a 90 degree angle. Hold the ankle joint with one hand and stabilize the thigh with the other hand. Now rotate the leg in and out for internal and external

rotation. They are also performed with the knee flexed and by inverting the knee for internal rotation and exerting it for external rotation

- Comment 'All movements of hip joint are painful and restricted. Or all movements of hip joint are painless and free'.

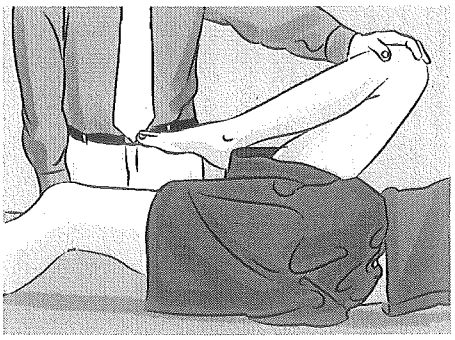
Tests

- *Trendelenberg's test-* Ask the patient to stand on each leg alternately. You stand behind the patient and feel their pelvis .It should remain level or rise slightly. In case of abductor muscle weaknesses the pelvis drops markedly on the side of raised leg.
- *Thomas's test-* place your hand under the patient's lumbar spine to stop any lumbar movements and fully flex one of their hips. Observe the other hip. If it lifts off the couch then it suggests a fixed flexion deformity of that hip.

Trendelenberg's test *Thomas's test*

Notes

- Pain in the hip may be a referred pain from the lower spine
- Some causes of hip pain are –osteoarthritis , rheumatoid arthritis , ankylosing spondolysis, reiter's disease, tumors etc.
- in paediatric age group think of Slipped Femoral Epiphyis and Perthes Disease
- Think of neck of femur fracture and complication from hip replacement in elderly patient
- Do not forget to examine the neurovascular status
- Always perform active movements before passive movements.
- Make sure you mention to patient what you are doing
- If patients seems to have pain always say sorry and stop.



3-KNEE JOINT

Prepare yourself

Wash your hands and explain to the patient what you are doing today. Before you start you must ask the patient 'Do you have any pain in your knee?' 'Where is the pain? Make sure both knees are appropriately exposed. The patient is asked to take of shoes ,shocks and pants.

Look

- This is the examination that you would do while the *patient is standing*. Knee should be in straight line with hip and ankle joints. Comment on any Valgus (knock knee) or Varus (bow leg) deformities. For example you can say 'there is no valgus or Varus deformity'

  Request that the patient *walks* and comment on his gait. You tell the examiner whether the gait is either normal or abnormal. Then you *look for* symmetry, redness, bruising, swelling, deformity, and scarring, muscle wasting from the front, side and back(for example baker's cyst). If there are any positive finding describe them thoroughly. For example 'I can see a scar in the medial aspect of the knee which is approximately 2 cm long'. You will be examining the patient standing and lying down.

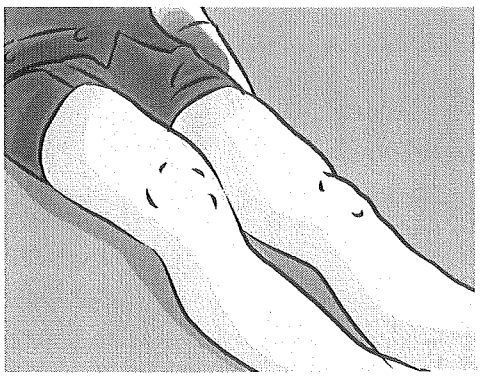
Feel

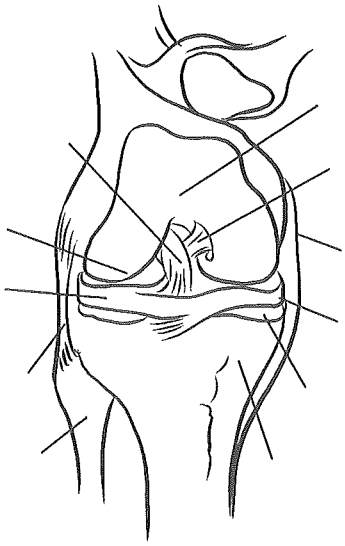
- Ask the patient to *lie on the couch* supine position, and then inform them that you will examine their knee.
- Look for *fixed flexion deformity* - The patient is positioned supine and made to relax. The examiner grasps both of the patient's heels and supports them at a height of 10 cm above the examination couch. This is the best position for screening a flexion deformity, which is a major feature of knee pathology
- Feel the skin *temperature* with the back your hand. Say 'the temperature feels normal or hot or cold'
- *Palpate patella-* Always examine the patella, when the knee joint is completely straight. You say 'Please straighten your knee joint out for me' and 'I am going to feel your knee cap'. Also feel the under surface of the patella by pushing it on either side. Do not forget to look at the face of the patient for any signs of pain.
- Also palpate the *patellar tendon.*
- Medial / lateral *joint line* – Please bend your knee joint at 90 degrees.
- Feel the *tibial tuberosity*. Medial and lateral condyle of tibia. Medial and lateral condyle of femur. Medial and lateral joint line palpate femur, Tibia and Fibula. Any pain in the medial joint line in knee is due to potential medial meniscus problems unless proved otherwise. Palpate the bony points.
- *Popliteal Fossa*
- *Femur*
- *Tibia*
- Then you look for *Effusion*. In mild effusion look for a bulge sign. You can perform this test by forcing fluid out of supra patellar pouch with your left hand . In moderate ones Patella tap and in large ones the skin will be both tense and shiny.
- Check the *dorsalis pedis artery* (DPA) 'I am going to feel the pulse of your foot now'. Palpate DPA in the med foot, lateral to EHL and in slight dorsiflexion of ankle joint. DPA is felt and it is a strong pulse.

Move

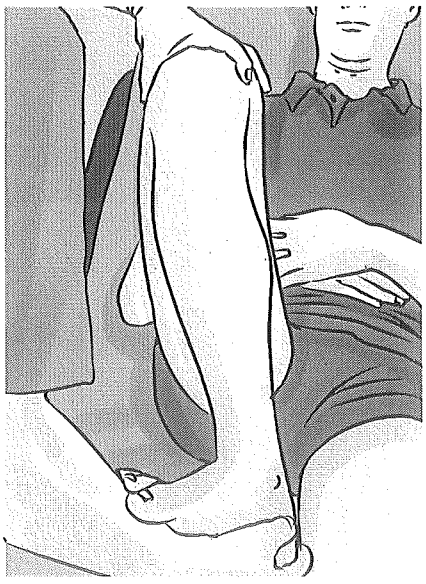
- We look for *Active and Passive* movements. We record it in degrees. Movements are either painful or pain free. They are full or restricted. A full range of movement should be demonstrated and you should look for the cripitus.

Flexion: Please bend your knee joint Extension: Please straighten your joint





McMurray- test for any damage of meniscus. Keep the patient in the supine position. Keep the hand in such a way that the fingers should be over the medial joint line and thumb should be over the lateral joint line. Through the heel, rotate the leg internally and externally. Apply valgus pressure on the medial side of the joint so that the knee joint faces outward. At the same time, rotate the foot externally and slowly make the knee joint align straight. A click or pop along the medial joint during the McMurry test indicates a tear of the medial meniscus. I will keep my hand over the knee joint. Then I will push your knee joint outwards. I will externally rotate your leg or foot and I will slowly straighten it out for you



- **Anterior drawer test**-- Anterior drawer test: Flex the knee to 90 degrees and sit on the patient's foot. Pull forward on the tibia just distal to the knee. There should be no movement whatsoever. If there is however, it suggests anterior cruciate ligament damage.
- **Posterior Drawer test** –with the knee in the same position, observe from the side for any posterior lag of the joint. This again suggests posterior cruciate ligament damage.
- **Medial and lateral stress test** for collateral ligament. Hold the leg with the knee flexed to 15 a degree angle. Push the knee laterally and medially. Any excessive movement suggests collateral ligament damage. Thank the patient. Ask them to cover up.

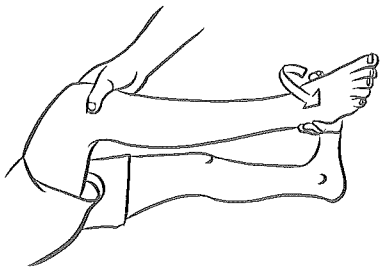
- **Lachman test** Flex the knee at 20deg. Hold the thigh with one hand and calf with the other. Give a backward push to the thigh and forward pull to the calf for anterior cruciate ligament. Do the other way around for the posterior cruciate ligament. This test is done when the patient is unable to bend the knee for drawers test.

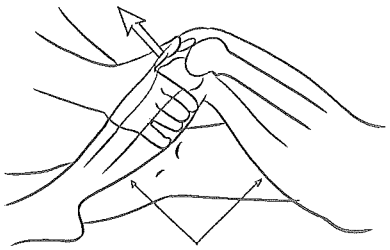
Muscle bulk-with both knees fully extended mark a spot about 20 com above the tibial tuberocity on both thighs and measure their girth. Muscle atrophy is confirmed if the bulk is reduced by more than 1 cm on affected side.

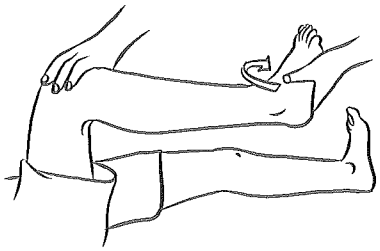
Common presentation to A&E , GP and orthopaedics

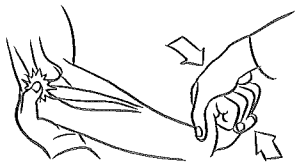
- Pain, laxity, knee locking, giving way are common symptoms and effusion
- Common conditions are arthritis, ligaments or cartilage injuries

Note : In Plab II, in knee joint, patient will have pain along medial joint line









- Cystic swelling seen anterior medial and lateral region of the knee can be from meniscus.
- Anterior swelling in the knee is from patellar bursitis and posteriorly from baker's cyst.
- Flexion of the knee is limited to 135-150 deg.
- Normal knee extends to straight line and it can be hyperextended to 15 deg.

4-ANKLE &FOOT

LOOK

Pt standing:

-Obvious deformity

- asymmetry
- foot arch
- toes
- swelling, Scar
- Plantar surface
- shoes

FEEL

Pt supine

- Temp
- Pulse
- squeeze test
- Achilles
- Joint tenderness- Med and lat malleolus
- fibular head
- calcaneum
- talus, Navicular, tarsal joint, subtalar joint

MOVE

- dorsiflexion
- plantar flexion
- inversion and eversion
- valus and Valgus
- Mid tarsal and subtalar (Passive only)

TESTS

-Simmond's test

FUNCTION

-Gait

- tip toes

Preparation

- Wash your hand and identify the patient correctly and explain to the patient what you are doing to them. Before you start you must ask the patient 'Do you have any pain in the knee?' 'Where is the pain?
- Expose the patient from the knee down

Look

- *Gait*-normal gait will be heel first and toe off.
- Looking for toe alignments.
- Look for obvious rheumatoid disease and walking aids
- Foot *arch* can be high arch (pes cavus) or also flat foot (pes planus).
- Feel the *Achilles tendon* for any thickening or swelling.
- While inspecting the patient's *shoes* we note for uneven wear and presence or absence of the insoles.
- Now ask the patient to lie down *on the bed.*
- *Check* for equal symmetry, nails, toe alignment, joint swelling and planter or dorsal calluses.

Feel

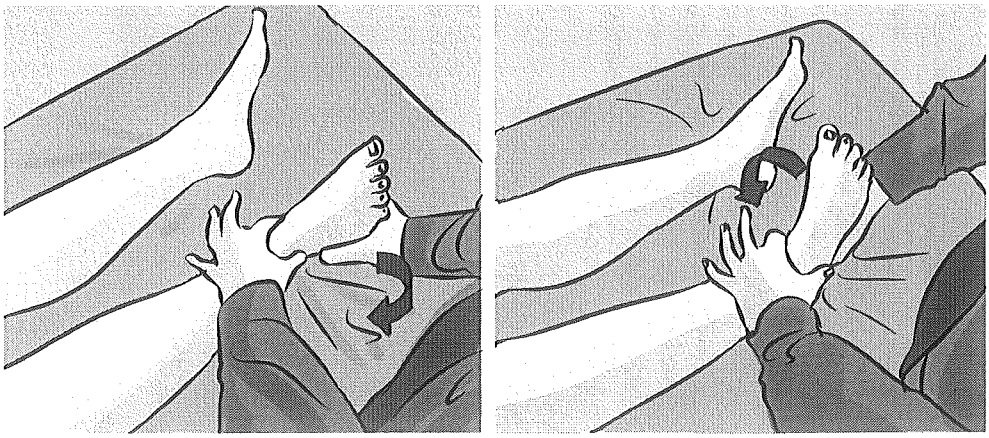
- *Squeeze* the fore foot observing the patients face for any possible sign of tenderness.
- Palpate over the *mid foot* for any tenderness. Also palpate ankle and subtalar joint.
- Feel for tender areas, systematically checking, the anterior joint line ,. the lateral gutter and lateral ligaments, the syndesmosis , the posterior joint line,. the medial ligament complex and the medial gutter.
- Palpate the *dorsalis pedis*

Move

- The *active movements* include inversion, eversion, planter and dorsiflexion. Look for toe movements as well.

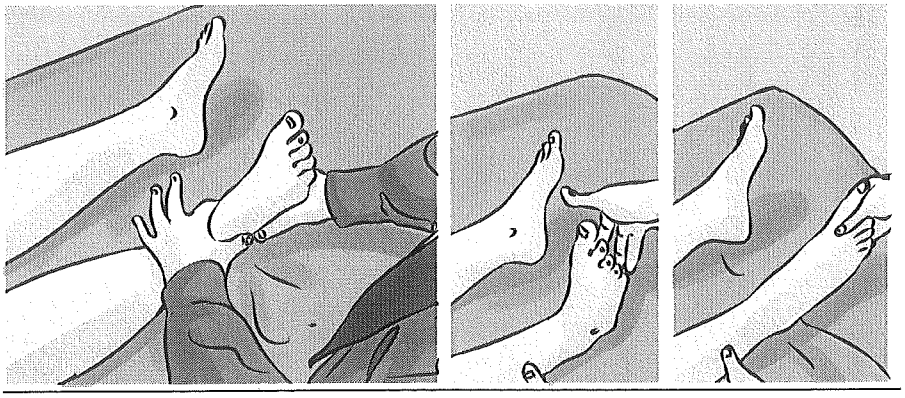
Subtalar Examination

Eversion Inversion



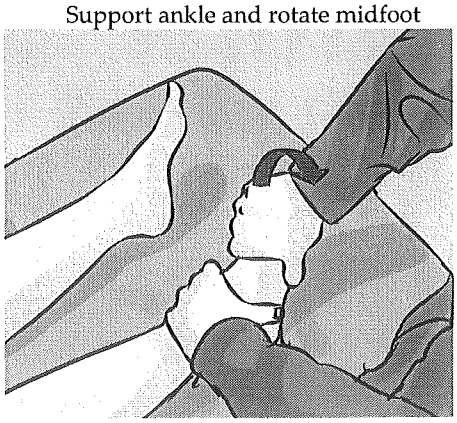
- The *passive movements* includes all of the above movements. Also we test for *mid-tarsal* joint movements. Here you fix the ankle with one hand and then inverting and exerting the foot with the other.

Palpation of Ankle Extension Flexion



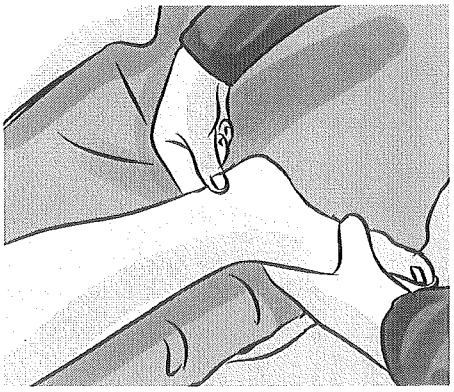
Tarsal Examination

Support ankle and rotate midfoot



Plantar Tendonitis

Achilles Tendonitis



Function:

- Walking on tiptoes will test the intact of Achilles tendon.

Examination of sensation in the foot

- Please close your eyes and whenever you feel my finger touching your foot and finger please say "yes".
- Check the sensation in big toe, small toe (Sural nerve) and first web space (Deep peroneal nerve). say 'Sensation of the lower limb appears to be intact'.

Ankle sprain

Mr X had an ankle injury. An X ray is normal and you have ruled out fracture. Discuss the diagnosis and ongoing management with Mr X

Introduce

Identify the topic for discussion: You have got a condition called an ankle sprain. What do you know about it?

General Information about Ankle Sprain

This is a very common injury of the ankle joint. This usually occurs due to inversion of the foot. With this condition the x-ray will appear normal but it does not mean that everything is fine because the x-ray shows only bone, not ligaments. Ligaments are rope like structures which bind the bone. In this condition it is damaged. This condition is treated with rest and painkillers. Walk as soon as possible when the pain becomes better. We do not use cast and we do not offer crutches for walking as well. Keep your limb of the leg elevated and do active toe movements.

Questions that patient is likely to ask

Can I go to play football?

I am sorry to say, avoid playing any contact sport for at least 4-6 weeks because ligaments take a varying amount of time to heal. Otherwise persistent pain here if healing is not complete

History for ankle sprain

Pain history as **SOCRATES**

Mechanism of Injury: Did you invert your foot during the incident? Or how did it happen? It is very important to get the mechanism of the injury correct so that we can think of possible sites of injury. For example the inversion of the foot may result in the fracture of the base of the 5th Metatarsal bone.

Assess loss of function: Are you able to walk OK?

Do you have any swelling?

Associated Symptoms

System Review

Past Medical History

- For raises, insoles, uneven wear
- Ask patient to stand on tiptoes if they cant can be due to hallux rigidus

5-SHOULDER JOINT

LOOK

- Symmetry
- Obvious deformity
- Swelling
- Wasting
- Scars
- Scapula

FEEL

- Temperature
- Sterno-clavicular joint
- AC joint
- Wing of scapula
- Coracoid process
- Humerus
- Muscles

MOVE

- Flexion
- Extension
- Abduction

- Adduction
- External
- Internal
- Rotation

TESTS

- Impingement test
- Apprehension test
- Scarf test

FUNCTION

- Arms behind the head
- Arms behind the back

Preparation

Wash your hands and then introduce yourself. Ask the patient if they are comfortable with the examination or if they need any painkillers. Ask the patient to stand up. Tell the patient that you_are going to stand behind them. Patient needs to be exposed from waist up therefore will need a chaperone.

Look

Patient should be standing. Look at the level of shoulders. Comment 'both shoulder joints are at the same level'. Look from the front, side and back. Look for symmetry, wasting and scar. Ask the patient to lean against the wall and look for the scapular position. Look for swelling, scar, deformity.

Feel

Feel for Temperature. A raised temperature may suggest inflammation or infection of the joint. Palpate the clavicle starting from the Sterno-clavicular joint to acromio-clavicular joint.

Feel the *acromion* and then around the *spine* of the scapula. Feel for the *Gleno-humoral* joint from the front and then again from behind. Feel the *muscles* for any tenderness.

Check *radial pulse.* 'I am going to feel the pulse of your wrist now'

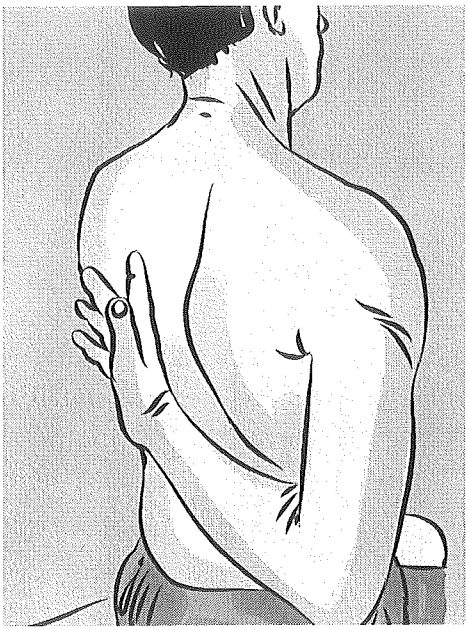
Move

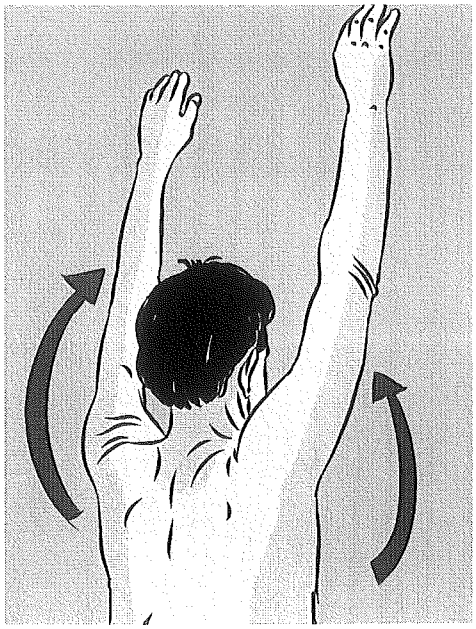
Start with *active movements.* For *Flexion* ask the patient to bring their arm forward. For extension ask the patient to push the arm backward while bending it at elbow. For *internal rotation* ask the patient to place their hand in the back. For *external rotation* ask the patient to flex the elbow, tug it by the side and then bring the hand outwards. For *abduction* ask the patient to bring the arm outwards and above the head.

Comment on the pain of movement, restriction of movement, symmetry of movement

Now do the movements passively and also feel for cripitus.

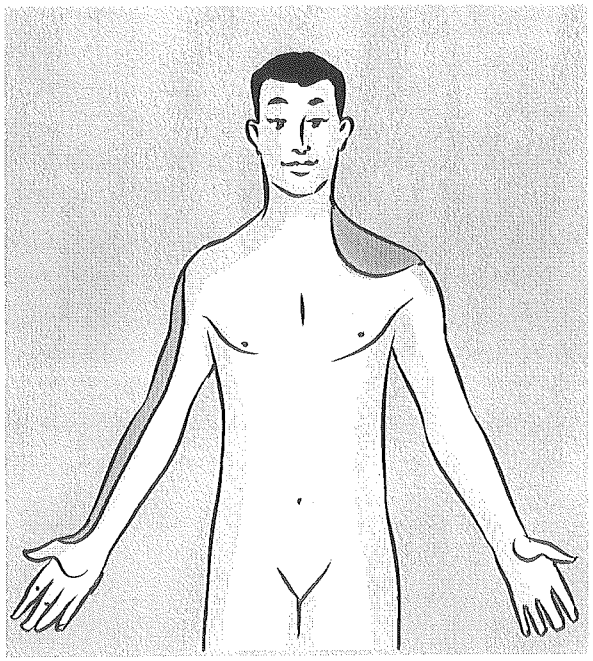
Internal Rotation Abduction





Tests

- *Impingement test-* Place the shoulder out at 90 degrees with the arm hanging loosely down. Press back on the arm and check for any pain. This is the test for supraspinatus.
- In *apprehension test* the arm faces upward. Apprehension test is for the Gleno-humeral joint stability.
- The *scarf test* is performed by having the elbow flexed at 90 degrees and placing the patients hand on the opposite shoulder.
- *Acromion clavicular joint examination*-ask the patient to place their hand on their opposite shoulder. If gentle pressure on the joint elicits pain, this is indicative of acromio-clavicular joint inflammation
- Arms behind the head and arms behind the back should be looked to test the functional abilities of the patient.



Notes

- The shoulder is derived from the fifth cervical segment and therefore refers pain into the C5 dermatome. The acromio-clavicular joint is a C4 structure and refers pain into the C4 dermatome.
- Angina, pleuritic pain and neck pain can have referred pain in the shoulder
- supraspinatus (pain on resisted abduction)
- infraspinatus (pain on resisted lateral rotation).
- subscapularis (pain on resisted medial rotation).
- sub-acromial bursa (pain at extremes of all passive ranges).

6-ELBOW

LOOK
- Deformity
- Swelling
- Scars
- Muscle wasting
- Carrying angle

FEEL
- Temp
- Joint tenderness

MOVE
- Extension
- Flexion
- Pronation
- Supination

TESTS
- Do Cozon's test

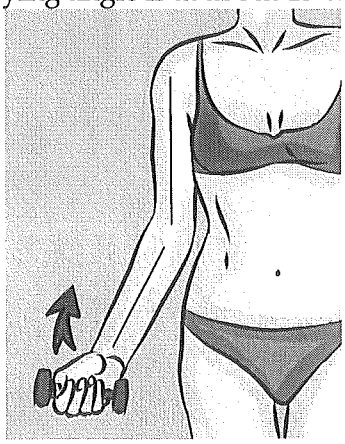
FUNCTION

Preparation:

- wash your hands and introduce yourself to the patient
- ask whether the patient needs any painkillers
- ensure the elbows are exposed for full examination
- The patient should be standing, with shoulders slightly braced back, to display the elbow.

Look:

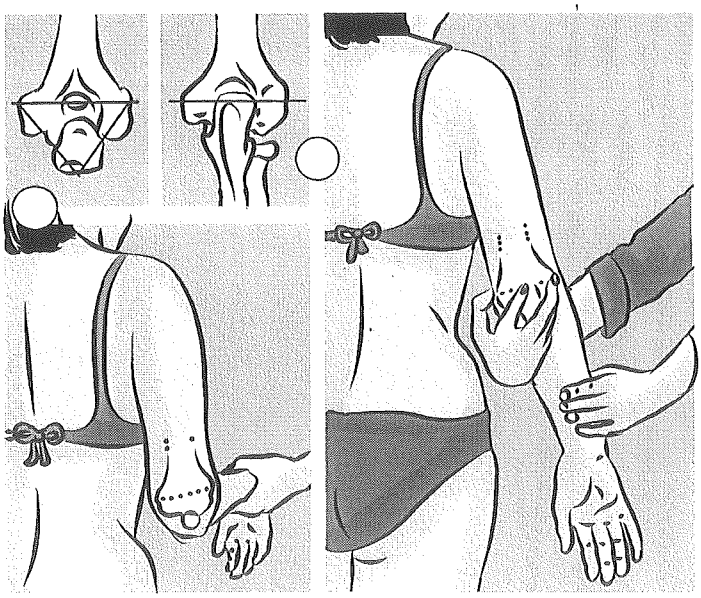
- Normal carrying angle is at about 15 degree.



- from the *side* look for fixed flexion deformity
- Rheumatoid nodules and psoriatic patches are some of the expected findings. Inspection may also show skin atrophy at steroid injection sites, or scars from previous surgery

Feel:

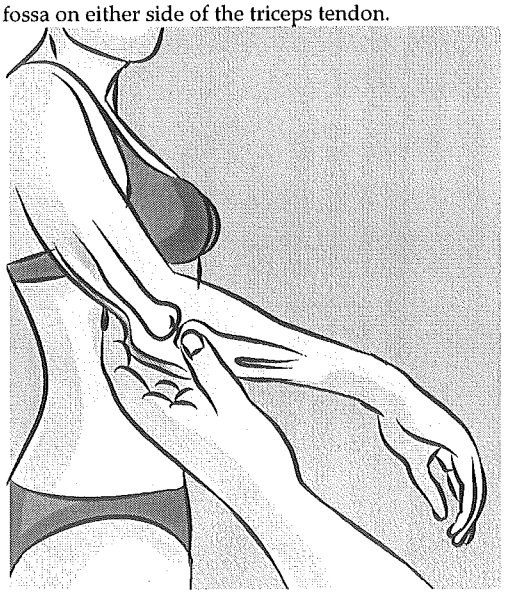
- *Palpation* starts at the posterior aspect, with the patient standing with his or her shoulder braced backwards
- The three *palpation landmarks* - the two epicondyles and the apex of the olecranon - form an equilateral triangle when the elbow is flexed 90°, and a straight line when the elbow is in extension



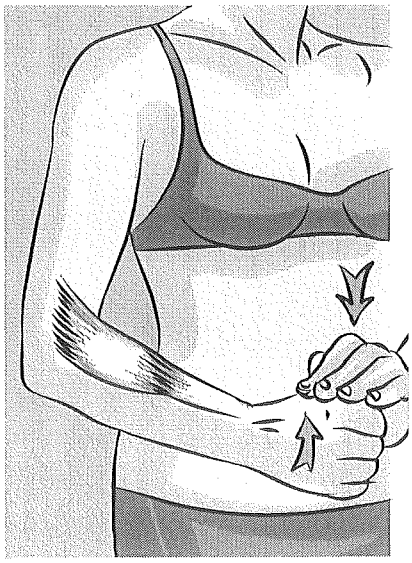
- *Flexing* the elbow allows palpation of the olecranon fossa on either side of the triceps tendon.
- *In bursitis*, a boggy globular mass may be palpated; the overlying skin will be thickened.
- Palpation and testing of *brachioradialis*, a forearm flexor

- The *ulnar nerve* is palpated behind the intermuscular septum. It may sometimes sublux or roll on the epicondyle. Ulnar nerve instability is more readily demonstrated if the elbow is flexed 60° and the upper limb is abducted and externally rotated.

Flexing the elbow allows palpation of the olecranon fossa on either side of the triceps tendon.

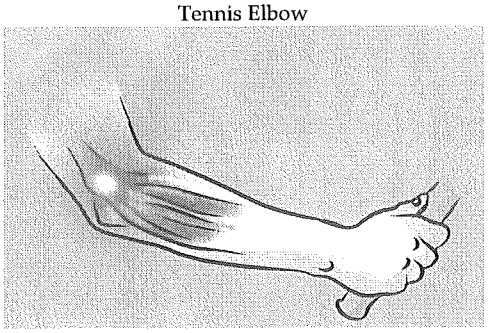


Palpation and testing of *brachioradialis,* a forearm flexor

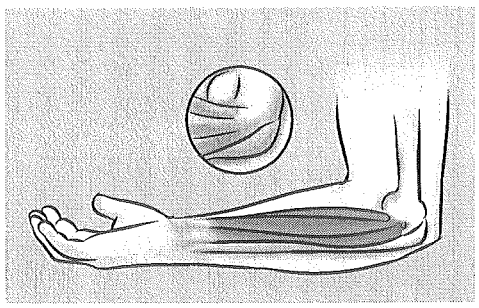


- *Tennis elbow*-localised pain in the lateral epicondyle mainly during the active extension of the wrist when the elbow is held at a 90 degree angle.
- *Golfers elbow* on the other hand is the medial epicondyle particularly when the wrist is flexed firmly.

Tennis Elbow



Golfers Elbow

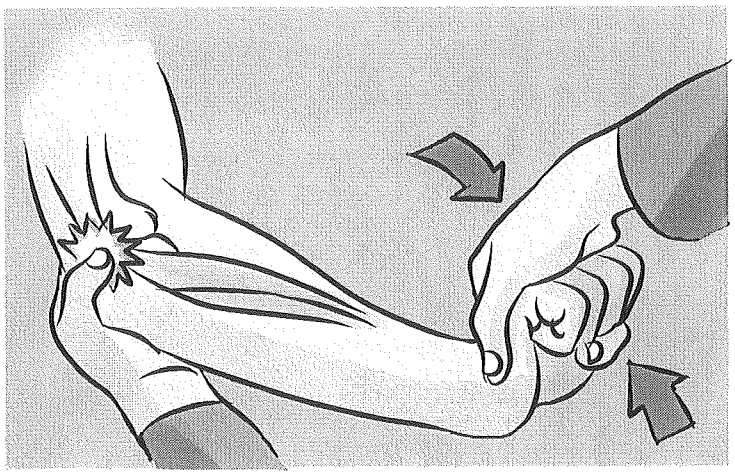


<u>Move</u>:

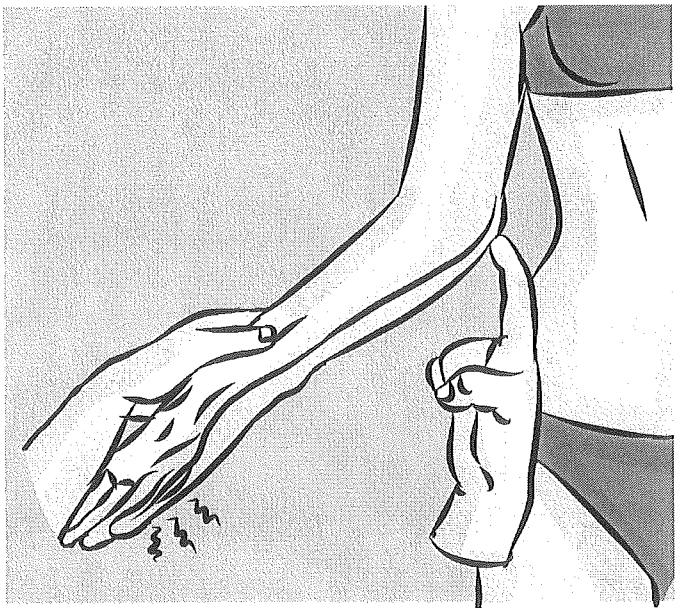
- Ask the patient to bend their elbow (*Flexion).*
- For *Extension* say; 'Please straighten your elbow'.
- For *Supination and pronation* keep patient's arm by the side of their chest. Bend their elbow at 90 degrees. Ask them to make a fist and rotate the arm as much as possible. Comment on whether the movements are painful and restricted or all movements are free and completely painless.
- Once movements are checked actively; do the same passively.

<u>Special Test</u>:

Do Cozon's test



- *Tinel's sign.* Paraesthesiae in the territory of the ulnar nerve allow an assessment of the likely site of compression



- Since the elbow is a superficial joint, many of its disorders can be readily detected by simple inspection
- Normal carrying angle -9 to 14 degree
- Any increase in, or loss of, this physiological angle is indicative either of major elbow instability or of malunion.
- on the side of the elbow, bulging in the para-olecranon groove will be seen; such a swelling is produced by an effusion or by synovial tissue proliferation
- On the back, prominence of the olecranon is a sign of posterior subluxation of the elbow, a feature commonly found in RA

Counselling – you have a condition called Golfer's or Tennis Elbow. This is a common condition. This is not a bone problem; this is a soft tissue problem. This occurs due to excessive movement of the elbow joint. In this condition x-rays of the elbow joint will be normal. I will give you painkillers to take for 4 weeks. Please give rest to your elbow for 4 weeks. I will give you a splint and I will refer you to a

physiotherapist for exercise. After 4 weeks we will see you again, if pain does not become less or disappear. I will then refer to orthopaedic surgeon. Do you have any questions? Thank you.

7-HAND

LOOK
- Deformity
- Scar
- Swelling.
- Wasting
- Symmetry
- Nails
- Palms

FEEL
- Temperature
- Bony Point
- Interphalyngeal joints of fingers PIP, DIP
- Pulse
- Muscle bulk
- Tendon thickening
- Joint tenderness

MOVE
- Flexion
- Extension
- Medial
- Lateral flexion

TESTS
- Phalen's
- Tinnels
- Forment's

FUNCTION
- Nerves-Ulnar, median, radial

Preparation

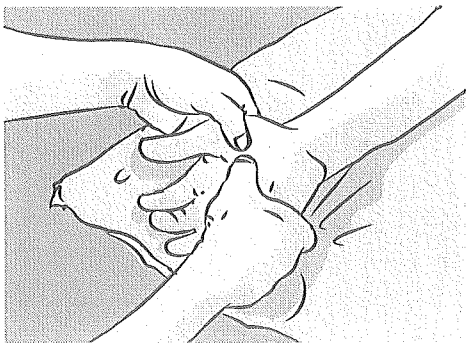
- introduce yourself to the patient
- explain what you would like to do and gain their full consent
- Ensure that the wrist and the hands are appropriately exposed
- place the patient's hands on the hand

Look

- Look at all mentioned in the box above
- look for operational scars for carpal tunnel and comment if there is one found
- skin changes and nail pitting are other specific signs that could be found
- Comment on joint swelling, mention which joint is involved and check with the other hand and comment whether the swelling is symmetrical
- palmer erythema

Feel

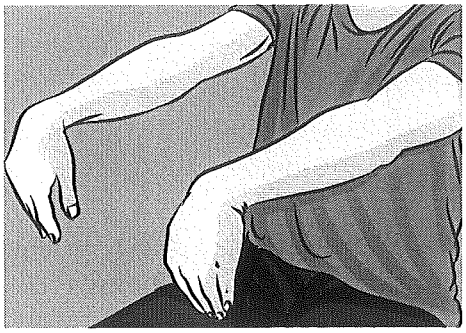
- This is the examination step .It is always better to develop a pattern so that your examination looks smooth and confident overall
- Compare the temperature of the joint lines with the forearm
- Palpate all the joints
- Palpate the thenar and the hypothenar muscles
- feel for any potential tendon thickening
- Squeeze the MCP joints and look at the patients face for tenderness
- Palpate Radial and ulnar styloid process



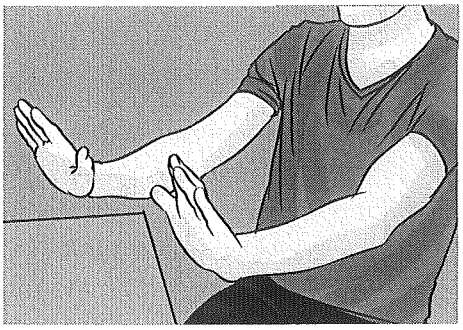
Move

- Wrist flexion and extension
- Fingers flexion, extension, abduction and adduction
- Thumb flexion, extension, apposition and abduction

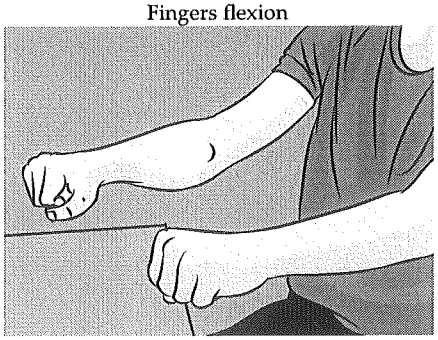
Wrist flexion



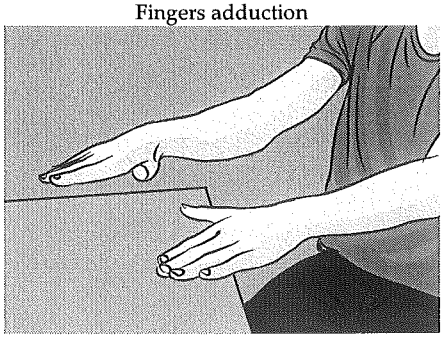
Wrist extension



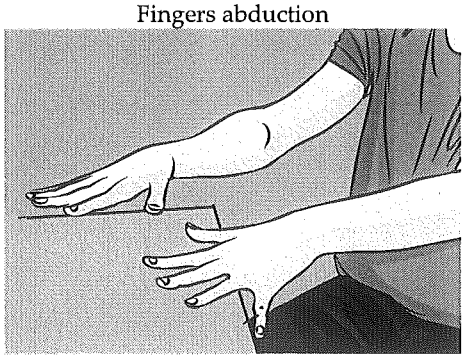
Fingers flexion



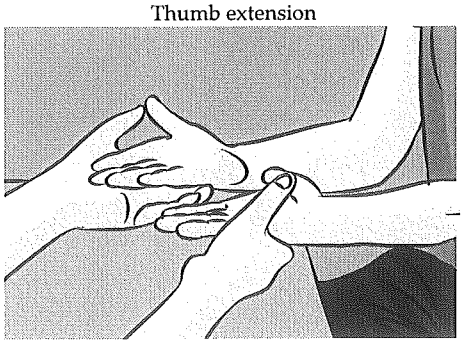
Fingers adduction



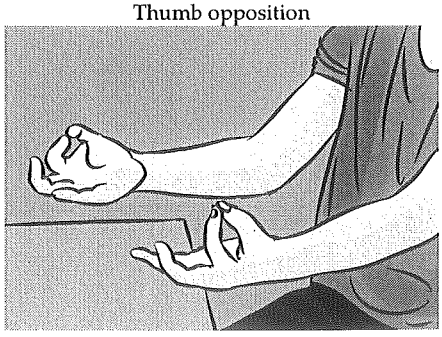
Fingers abduction



Thumb extension

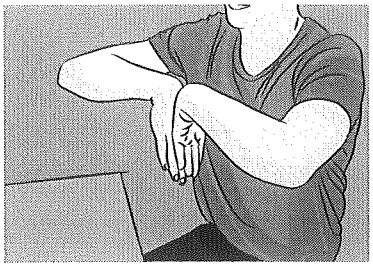


Thumb opposition



Tests

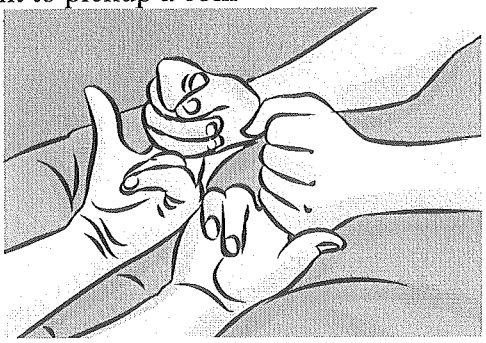
- *Phalen's test* – this is a diagnostic of carpal tunnel syndrome. Flex the patient's wrist for 60 seconds. It will recreate the symptoms of carpal tunnel syndrome.

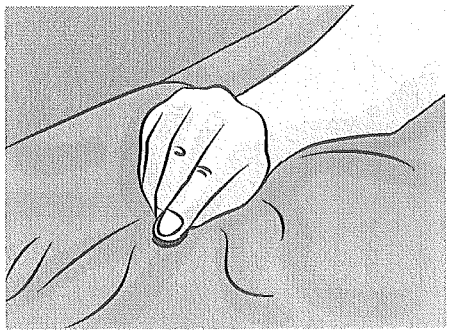


- *Forment's sign-* this test is for ulnar nerve. Ask the patient to hold a piece of paper between their thumb and the index finger. In patients with the ulnar nerve dysfunction the interphalyngeal joint of the thumb will flex to compensate pressure.
- *Nerve sensation-* 'I am going to touch your hand now. Whenever you feel my finger touching your hand, please say yes'. For Ulnar nerve palpate pulp of little finger. For Radial nerve it is area between thumb and index on the back of hand. For Median nerve feel the pulp of index finger.

Function

- ask the patient to grip your finger tightly
- ask the patient to perform the pincher grip
- ask the patient to pickup a coin





NEUROLOGICAL TEST

Sensory

- C6-thumb and index finger
- C7-middle finger
- C8- ring and little finger

Median nerve

- thenar eminence-muscle wasted
- sensation in palm ,index finger, middle finder and half of ring finger

Ulnar nerve –

- hyposthenia eminence
- sensation to the palm ,dorsum of the hand , the little finger and half of the ring finger
- damage causes claw deformity in the little and ring finger because of loss of innervation to interossei and lumbrical muscles

Radial nerve –

- first dorsal web space
- causes wrist drop

8-CERVICAL SPINE

LOOK
- swelling
- scar
- deformity

FEEL
- Temperature
- Bony Point – Spinous process
- Para spinal muscle

MOVE
- Flexion
- extension
- lateral rotation
- lateral flexion

TESTS
- **Upper limb**- Tone, power, reflex
- Check sensation- C5, C6, C7, C8, T1

FUNCTION
- Reflexes

Look
- With patient in sitting position
- Look for malunion and non-union, torticollis
- Anteriorly look for hyoid , thyroid
- Laterally look for lordosis
- Look from behind

Move

Flexion	Chin to chest
Extension	Look up at the cielling
Lateral rotation	Normal 60 to 90 degree
Lateral bending	Touch the ear to the shoulder

Motor examination

Shoulder abduction	C5
Elbow flexion	C6
Elbow extension above the head	C7

Pronation	C7-C8
Supination	C6
Wrist extension	C6
Wrist Flexion	C7
Finger extension	C7-C8
Finger flexion	C7-C8

Reflexes

Biceps	C5, C6
Triceps	C7
Brachiao radialis	C5-C6

	C5	C6	C7	C8	T1
Sensation	lateral arm	thumb	Middle finger	Little finger	Medial arm
Motor	deltoid	Wrist extension	Triceps	Finger flexion	Interossei
Reflex	Biceps	Brachio-radialis	Triceps		

9-LUMBOSACRAL SPINE

LOOK
- Swelling,
- Deformity
- Scar

FEEL
- Temperature
- Spinous process
- Paraspinal muscle
- Muscle tenderness and spasm

MOVE
- Flexion
- Extension
- Lateral rotation
- Lateral flexion.

TESTS
- Tone
- Power
- Reflex
- Do SLR

FUNCTION

SLR tells whether or not the nerve root is compressed.

Leseque tests – Tells whether more than one nerve or only one nerve root is evolved.
Check sensation briefly along with dermatomes – L1, L2, L3, L4, L5, and S1.

9-SPINE EXAMINATION

LOOK
- Standing: Shoulder level
- Asymmetry
- Scoliosis/ kyphosis
- Wasting/ scar/ swelling

FEEL
- Temperature
- Spinous process
- Paraspinal muscle
- Neurovascular and PR and perianal sensation

MOVE
- Flexion (sobers test)
- Extension
- Lat flexion
- Rotation
- Neck flexion/extension/ lateral flexion/ rotation

TESTS
- Tone
- Power
- Reflex
- Do SLR Neurovascular and PR and perianal sensation

FUNCTION

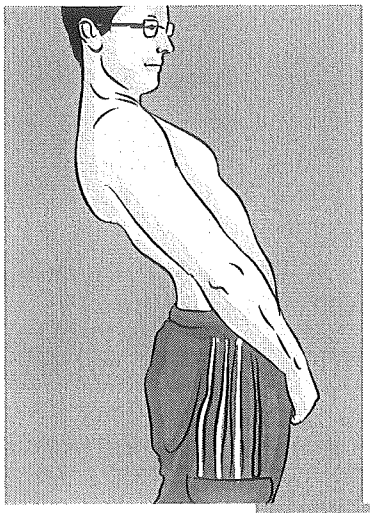
Preparation
- Wash hand
- Introduce yourselves
- ask whether patient is in pain and is happy to be examined
- take the top off the patient

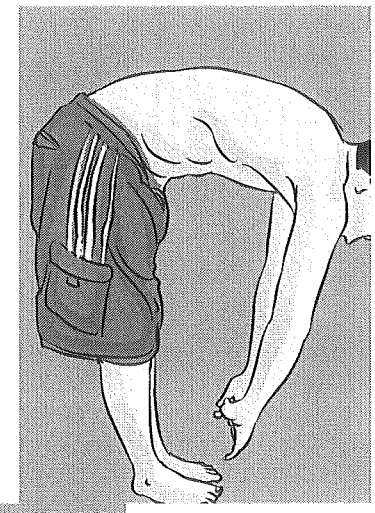
Look
- Look from side
- Look from behind
- Comment on any finding

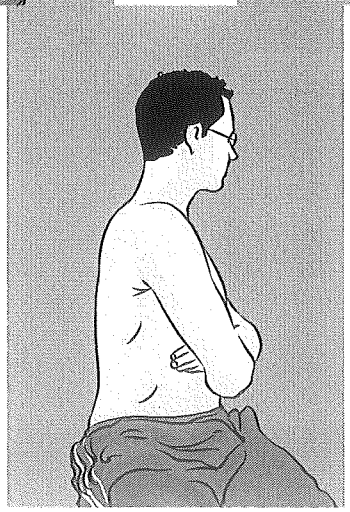
Feel
- Feel for temperature
- Feel the bones –spinous process
- Feel saccro –illiac joint
- Palpate paraspinal muscles

Move

- Look for lumbar flexion and extension
- Lateral flexion
- Thoracic rotation
- Straight leg raise





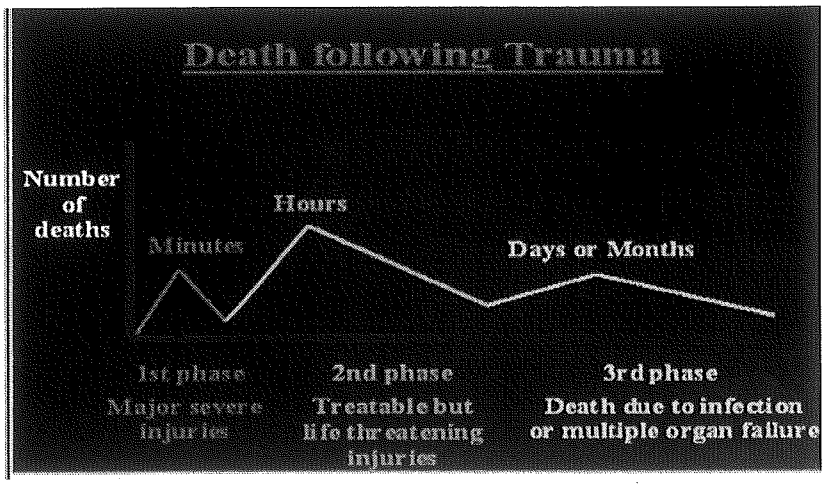


10-TRAUMA

Concept of management of acute trauma Trauma teams Primary survey Secondary survey

Concept of management of acute trauma

Trauma is one of the major killers of modern world. It is one of killers that kills young and healthy person. Managing trauma is very important.
Trauma has tri-modal pattern of mortality. The first peak is at the scene of injury. The second peak is within few hour of injury and the third peak is in weeks from injury.



The *first peak* within minutes is at the scene. The deaths in this group are caused by lacerations of brain, aorta, spinal cord and heart. There is very little that we could do to treat these group. The focus of decreasing the mortality is on safety. Some of the things that could be done are

- Education and public awareness
- Strong road safety rules
- Building more safe cars
- Use of protective gears
- Regulated licencing system

The *second peak* of mortality occurs in hours. The main killers in this group are

- Epidural haematoma,
- subdural haematoma,
- haemopneumothorax,
- pelvic fractures,
- long bone fractures
- Abdominal injuries.

Early recognition and prompt treatment of these conditions can be lifesaving

The *third peak* occurs between two to four weeks. The main causes are sepsis and multi organ failure.

Thus we can say that we can prevent deaths of the second peak .This is what is the need of trauma teams in the hospitals.

Trauma teams

The concept of trauma team is to get all specialities involved early in the management of patient with trauma so that the diagnosis and treatment starts early .The trauma team comprises of

- A&E doctors (consultant or senior registrars) with nurses
- Anaesthetic registrar and nurses
- Surgical registrars
- Orthopaedic registrar

The team is led by the A&E clinician and follows the sequence of primary and secondary survey.

Primary Survey

These are the life threatening situations assessed. The principle is to 'find and fix'. We follow

- A-airway
- B-breathing
- C-circulation
- D-disability
- E-expose

Secondary survey

The aim of the primary survey is to detect and treat immediately life threatening problems. The secondary survey aims to detect and treat 'everything else'. Therefore the secondary survey should not be started until the primary survey is complete, repeated, and the patient as stable as possible.

This is head to toe detail examination

11-PRIMARY SURVEY

A- Airway Oxygen Cervical immobilisation B- Respiratory rate Tracheal position Chest symmetry C- Blood pressure Heart rate Capillary refill time D- AVPU score Pupils BM

E-
Expose the patient
Cover

As mentioned in the previous section this is time critical and rigorous management.

A-Airway

This is the first and the most important step. Start by checking whether the patient has the cervical collar. If not hold his neck then only start assessing the patient.

Connect full flow oxygen with a rebreathing bag.

Talk to the patient. If the patient can talk to you his airway is patent. If he cannot then listen for noisy breathing. If there is noisy breathing airway may be obstructed and following could be done to maintain the patency

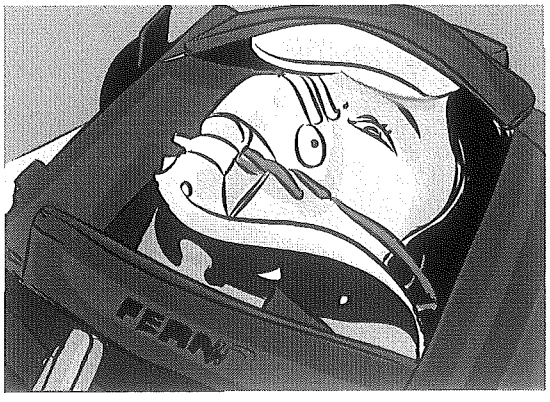
- Chin lift
- Jaw thrust
- Suction to clear the mouth and throat
- Removing any foreign body

Sometimes we may need *adjuncts* to keep the airway patent. They can be

- Oropharyngeal or guedels airway
- Nasopharyngeal airway

Going further up if the airway is still not patent we can use the experts in trauma team to *intubate* the patient.

Once airway is patent you can then fix the neck. The neck should be immobilised in collar with sand bags and tape.

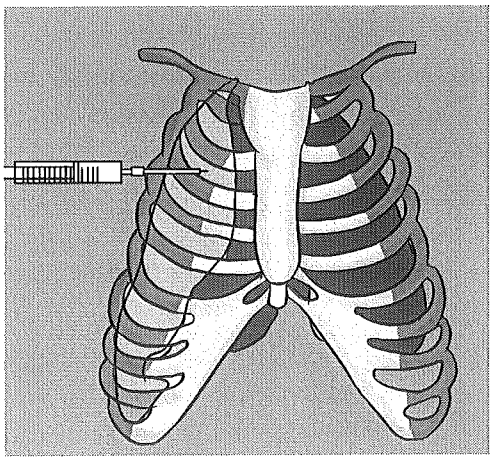


Remember the neck has to be manually immobilised all the time till airway was dealt with.

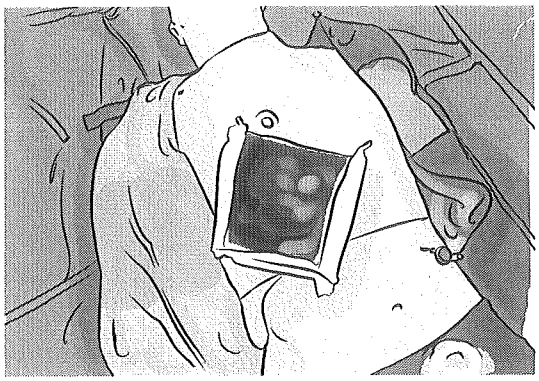
B-Breathing and ventilation

Look for respiratory rate. Then palpate trachea and find out whether it is in mid line or deviated to one side. Then look for chest symmetry. Chest symmetry starts with inspection. Then in percussion we confirm whether the chest is dull or normal or hyper resonant. Then we auscultate to find the air entry. In this step we are trying to pick up potentially life threatening conditions like

- Tension pneumothorax - requires needle thoracotomy followed by drainage.
- Insert wide bore needle in second intercostal space mid clavicular line on the affected side.
- Definite treatment is the chest drain



- Flail chest - management involves ventilation.
- Haemothorax - will usually require intercostal drain insertion. This is one of the situations when you put cannula before putting the drain
- Pneumothorax - may require intercostal drain insertion.
- Open chest wound- needs dressing covering it and sealed in three sides leaving one side open to act as valve.



- Think of flail chest .Fracture of two or more ribs at two or more sites.

C-Circulation

This is to assess the haemodynamic status .we look for heart rate, blood pressure and capillary refill time. Other parameters like level of conscious ness and bleeding are also important.

The management in C area is stopping bleeding and fluid and blood replacement.
Two large bore cannula need to be sited. Bloods should be send for test. Fluids should be started.
Sometimes we will not be able to site a canula when we can use intra osseous accesses.
Direct manual pressure should be used to stop bleeding. And also we should actively look for internal bleeding. FAST (Focussed abdominal sonography in trauma) is a tool used these days. CT scans should be used where needed. Sometimes when the bleeding is internal and very active we may have to do emergency laparotomy. This is why we have surgeons in trauma team. Fracture pelvis and long bone fractures are also the source of blood loss.

response to blood loss differs in:

- Elderly - limited ability to increase heart rate; poor correlation between blood loss and blood pressure.
- Children - tolerate proportionately large volume loss but then rapidly deteriorate.
- Athletes - do not show the same heart rate response to blood loss.
- Chronic conditions and medication may affect response and early on in trauma management will not be known about.

D-Disability

Rapid neurological assessment is made to establish:

- Level of consciousness, using AVPU score. A is alert, V-patient responds to verbal command, P-patient responding to pain and U- unresponsive patient. We can also assess by using GCS (Glasgow Coma Score).
- Pupils: size, symmetry and reaction.
- Any lateralising signs.
- Level of any spinal cord injury (limb movements, spontaneous respiratory effort).
- Blood glucose measurement.

E-Exposure and environmental control

Cut off all the clothing of the patient. This has two fold advantage. One we remove the wet, or exposed to chemical environment type of cloths. This also helps us to look for any active bleeding, injuries and drug patches that patient uses.
At the end of this step we have to cover the patient. Remember that Hypothermia is one of the killers in trauma patients.

Primary survey X-rays
At the end of primary survey we request x rays
They include-chest X ray, lateral cervical spine and pelvis

- Do not forget to verbalise about airway patency
- If patient is lying down without collar make sure you introduce, tell patient not to move his head, hold his head and triple immobilise.
- Request for assistance early
- Think of tension pneumothorax in B
- Make sure you mange bleeding correctly
- Signs like bruises, deformity, blood in external urethral meatus, scrotal or perineal haematoma may be apparent
- Application of pelvic binder can be one of the treatments in C
- Think of cardiac tamponade In C-decreased level of consciousness, cold peripheries, hypotension, and muffled heart sound-urgent pericardiocentesis is needed.
- Think of intra-abdominal bleed in C-distension, bruising, wounds, tenderness, rigidity, guarding, flank dullness, absent bowel sounds etc-ultrasound scan if available can help . Otherwise urgent exploration may be needed.
- Monitoring will include cardiac monitor, pulse oximetry and blood pressure.

12-SECONDARY SURVEY

The Secondary Survey
1. History
2. Head
3. C Spine & Neck
4. Chest
5. Abdomen & Pelvis
6. Perineum/Vagina
7. Arms & Legs
8. Spine & PR
9.Neurological examination
+/- Investigations

Here we get quick history and do detailed head to examination. Note is made of the abnormalities and plan drawn at the end of the secondary survey.

History

It is very important to understand the possible type of injuries.
Following can be asked to help us:

- The speed,
- type of accident (e.g head on collision, hit from behind),
- type of vehicle,
- whether seat belt was on,
- whether air bags was deployed,
- amount of damage done to the car
- what happened to fellow passenger

On the top of the above it is important to get the AMPLE history

- Allergies
- Medications
- Past medical history (& Pregnancy)
- Last meal
- Events related to accident

Remember we do not need to take long history

Examination of head

- Look for lacerations ,bruises (remember panda eyes, battle sign etc), depression or irregularities
- Look for bleeding from nose and ears
- Nose: deformities, bleeding, nasal septal haematoma, CSF leak
- Remove contact lenses
- Eye movements
- Acquity

- Eyes: foreign body, subconjunctival haemorrhage, hyphaema, irregular iris, penetrating injury, contact lenses.

- Look in the mouth-remove dentures, bleeding sites from lips gums and palate.
- Jaw: pain, trismus, malocclusion
- Teeth: subluxed, loose, missing or fractured
- Palpate maxilla and mandible

Cervical spine and neck

- Cervical spine should have been immobilised
- Senior doctor has to reassess and decide any further investigation is needed or collar can come off
- Look for other injuries
- Palpate trachea

Chest examination

- Inspect the chest for bruises, lacerations, or flail segments
- Palpate the clavicles, ribs, and sternum
- Record the respiratory rate, saturations, pulse, blood pressure
- Auscultate the heart and lungs

Abdomen and pelvis

- Inspect for flank bruising, seat belt marks, abdominal distension
- Inspect for bruising over the iliac crests, perineum, and pubis.
- Palpate the abdomen
- Do not apply anterior-posterior pressure on the pelvis
- Remember spring test used to be done –do this test only if there are no signs on inspection.

Perineum

- inspect for bruising, lacerations, urethral bleeding
- Inspect the urine colour if a catheter is inserted. Consider placing a catheter if it is not.
- If indicated, perform a vaginal examination and assess for the presence of blood.
- Always perform a urine pregnancy test.

Arms and legs

- Inspect for bruising, lacerations, and deformities.
- Palpate along the entire length of each limb carefully, including digits.
- Test sensation and power

Spine

- A log roll should be conducted at the end of the Secondary Survey.
- The lead clinician should take this opportunity to thoroughly inspect the posterior chest, pelvis and legs.
- The spine should be palpated at this stage.

- Finally, a digital rectal examination should be performed and the following assessed: the presence of blood, a high riding prostate, and sphincter tone.

Neurological examination

- GCS
- Pupils

At the end of secondary survey consider relevant Investigations

In exam situation when patient is in pain always say sorry and ask whether you can proceed with examination

PLAB Right Limited

PAEDIATRICS

Pediatrics History Taking: Crying Baby Weight Loss Foreign Body Ingestion Delayed walking Diarrhea Chronic Diarrhea Telephone Conversation: Diarrhea Fever Telephone Conversation: Fever Loss of Consciousness Uncontrolled fits ITP Assessment of suitability for the surgery Counselling: Ear Infection/ URTI Needle Stick Injury Irritable hip Spacer Splenectomy Meninococcal Septicemia Obesity Downs Syndrome Diabetes Hypoglycemia Unconcious Child Urinary Tract Infection Scabies Asthma Inhalers Cerebral Palsy Fever Nappy Rash Febrile Convulsions Celiac Diseas Peanut Allergy Infantile Colic jehovah's witnesses Mock Test MMR Non Accidental Injury			

Mrs Staples, mother of 9 month old child John has come to A & E complaining of crying and passing red coloured stools. Take history and discuss the management.

Examiner will later tell you the following information and may ask some questions
VITALS Bp = (90/60) mm Hg
Pulse = 160/ minutes
RR = 28 / minutes

CAUSES OF PR BLEEDING IN 9 MONTH OLD CHILD
Causes are – Rectal polyp, piles, anal fissure, infective diarrhoea, intussusception, and trauma.
Rectal polyp – Is stool mixed with blood?
Anal fissure – Does she cry when she opens her bowel?
Infective diarrhoea – What is the consistency of stool? Is he having any fever? Who many times does he pass stool?
Trauma – Has he injured himself?
Intussusception – Does he cry in episodes? What is the colour of his stool? Is it red currant jelly like?

NOTES ABOUT INTUSSUSCEPTION
Intussusception is the commonest cause of small bowel obstruction. It occurs mostly in winter season in the age group of 9-12 months. Child will cry continuously in episodes and he will draw up his legs. A mass can be felt in the left iliac fossa, which is known as empty dance sign. If this condition is not recognised initially, then it can cause gangrene and perforation of the small bowel. Initially it is treated by conservative method that is by air enema, otherwise paediatric surgeon will operate to reduce it.
Possible Differential Diagnosis are: UTI, infective diarrhoea and intussusception.

History Taking
Open Question: Can you tell me more about the problem?
HOPC: Duration, onset, progress, nature of symptom and aggravating and reliving factors.
Associated symptoms
How would you ask the nature of these symptoms (Crying and Red colour stolls)

Crying: Pattern- continuous or episodic, duration, how does he settle?
Red colour stools-

DD
UTI – Is he having any fever? Is he crying when he passes water?

Infective diarrhoea – Did he vomit? If yes, what is the colour of vomiting? How many times has he opened his bowel?

Intussusception – Is he drawing up his legs? Is he passing any blood in his stool? Do you think the stool looks like red current jelly?
Have you noticed any lump (sausage shape) in the abdomen?

Other general questions:
Is he up to date with vaccination schedule?
Can you tell me about his developmental milestones?
Any problems during pregnancy or birth

Past history
Has he suffered or suffering from any health problem
Is he taking any medicine?

Explain the diagnosis

Child has got a condition called intussusception. In intussusception, there is telescoping of one portion of the bowel into the other

Management of Intussusception

I will examine and will admit the child

I will give him 02, I will keep him nil by mouth, I will put nasogastric tube, I will put 2 wide cannula, and then I will give fluid, catheter, maintain info chart, monitor vitals after every 15 minutes, inform the paediatric surgeon, operation theatre staff along with anaesthetist, tell the condition to mother. It is managed by conservative method initially, by putting air through the back passage. In later stage if it is difficult to reduce, we have to operate.

WEIGHT LOSS

3 yr old Edward is referred by his GP for weight loss. He has come to pediatric out patient clinic with his mother. Take history from Mrs Gilbert. Your examiner may ask your opinion

History Taking

Open Question: Can you tell me more about the problem?

Nature of weight loss
Current weight and height, How much weight he has lost and since when he has been loosing weight?

Diet history – How is his appetite? Any changes noted in his diet
Activity- Any recent changes to his daily activity
Abdominal problem – Is he having loose stool? Is it difficult to flush away the stool?
If yes, Ask for duration, progress nature of diarrhoea and precipitating factors (any particular type of food)

Nature of Diarrhoea
How many times, colour, consistency, how does it flush away, any mucous or blood

R/O DM – Does he pass lots of water? Does he drink lots of water?
Have you noticed any lumps or bumps elsewhere in the body?

Heart problem – Is he having any SOB? Is he having any chest pain?

Past History

Is he having any medical illness? Is he taking any medicine?
How is his general health? (Any recent chest infections)
Was there any problem during pregnancy? What was the method of delivery? Was there any problem during delivery?
Can you tell me about his development milestone? Can you tell me about his vaccination schedule?

DD

Cystic Fibrosis: Recurrent chest infection
Celiac Disease:
Infection/ infestation
Malignancy

FOREIGN BODY INGESTION

Child has swallowed a 5p coin. Take a brief focused history and explain management
Introduction
Open Question: Can you please tell me more about it?
HOPC: When? How? Who was present at the time?
What happened immediately after? Did he choke? Did he become breathless?
How is he now? Is he breathless at the moment? Is he alert? Is he playing?
If he has any symptom at the moment, explore that symptom accordingly

Past History:
Any similar problems in the past
General health, any previous health problem and any current treatment he is receiving

We are going to examine and we will do x-ray of neck, chest and tummy. If the coin is in the airway, then we have to remove it.
If history suggests that the child is fine:
Since he was fine after ingestion, I do not think that coin is in airway.
If it is in food pipe or tummy then we can wait for a couple of days, in which the coin will come out through stool. For this you have to keep an eye on the stool for 2-3 days.
Very rarely it can cause obstruction, so please notice the unusual symptoms like vomiting, distension of the tummy and constipation.
If this happens then bring your child immediately to hospital.

DELAY IN WALKING

24 month old John is not walking. Take a brief focused history and talk to mother about management
Introduction: Explain purpose of the visit and task
HOPC: Can you please tell me more about the problem
Find out exactly what can child do. Can you please tell me what does john do?
Does he walk with support? Can he stand on his own? Does he crawl?
Has he ever walked?
Is he unable to do any particular activity?
Is he progressing? Find out about the progress and development
Can you tell me about his developmental milestone?
DD
Rule out Cerebral palsy – Did he have any fits? Is he having any vision or hearing problem?
Rule out CDH – Congenital hip – Does he walk with a limp?
Rule out Bleeding – Have you noticed swelling in the limb? Is there anyone in the family who is having bleeding problem?
Rule out Muscular dystrophy – Is there any one in the family who is having muscle related disease.
Rule out Trauma – Has he had any injury to his limbs in the past? Is he having any medical illness? Is he having any medicine?
Past history – Was there any problem with pregnancy? Was there any problem during delivery?
Is he up to date with vaccination schedule?
How is his general health? Is he on any medication?
Family history – Is there anyone in the family who has had similar problem?

Thanks for the information. I would like to examine John and will have to do some further test to find out the cause for the delay in walking. Some time children have delayed motor development for no reason and they catch up with time. We will however have to make sure that he has no health problem that can be corrected.

PLAB Right Limited

DIARRHOEA

History Taking

Causes of Diarrhoea and symptoms:

Viral: Most common cause.
Symptoms: Fever, stomach ache, vomiting and watery diarrhoea. Vomiting typically lasts only two to three days, the diarrhoea can last for one to two weeks
Treatment: Plenty of fluids to prevent dehydration. Look for signs of dehydration

Bacteria:
Symptoms: Bloody stools that are mucousy, fever, cramps and abdominal pain, and a loss of appetite
Treatment: Plenty of fluids to prevent dehydration. Look for signs of dehydration
Shigella infections, or shigellosis are commonly treated with antibiotics, but other infections, including salmonellosis do not improve with antibiotics

Protozoal:
Symptoms: typically have large amounts of watery diarrhoea without blood, abdominal cramping. Travel history may be present. Diarrhoea can usually be longer than 2 weeks
Treatment: Plenty of fluids to prevent dehydration. Look for signs of dehydration Antiparasitic medications, including furazolidone and metronidazole can be used after confirmation

Food Poisoning:
Symptoms: vomiting, diarrhoea, abdominal cramps, nausea and fever and they begin a short time after eating a contaminated food.
Treatment: Plenty of fluids to prevent dehydration. In most people symptoms are mild and clear up quickly

Chronic Diarrhea: (Diarrhoea that lasts for more than two weeks)
Malabsorption caused by cystic fibrosis, and celiac disease
Lactose intolerance

History:
Open Question: Can you tell me more about the problem?
HOPC: Duration, onset, progress, nature of symptom and aggravating and reliving factors.
Nature of diarrhoea

Frequency, colour, consistency, quantity, any blood or mucous and smell

Associated symptoms:
What is associated with diarrhoea?

1. Vomiting
2. Nausea
3. Abdominal Pain
4. Fever
5. Symptoms of dehydration:
   Passing little urine, a dry mouth, fewer tears, weakness, lethargic, drowsiness, cold hands or feet and very few wet nappies
6. Weight loss

DD
What are the possible Differential Diagnosis?

Past History
Is he having any medical illness? Is he taking any medicine?
How is his general health? (Any recent chest infections)

TELEPHONE COVERSATION – DIARRHOEA
Introduction
Please can you give me your phone number and address, so that I can call you back if this phone gets disconnected?
Can you tell me more about the problem?
HOPC
Find out following high risk factors. If any one present ask the mother to bring the child to hospital

1. Age less than 6 months
2. Any underlying medical condition. (heart, kidney problems, diabetes, etc)
3. Fever
4. Dehydration (ask for symptoms of dehydration)
5. If child appears drowsy or confused.
6. Vomiting and unable to keep fluids down.
7. Blood in their diarrhoea or vomit.
8. Abdominal pain.
9. Travel History.
10. Severe symptoms
11. Vomiting for more than 2 days
12. Diarrhoea that does not settle after 3 days.
13. If you are in doubt

History Taking: Fever

Open Question: Can you tell me more about the problem?
HOPC: Duration, Onset, Progress and Nature

Write Nature of Fever

Rule out Meningitis – Is he having any neck stiffness? Is he avoiding bright lights? Is he alert?
Rule out Viral infection – Is he having any cold or cough?
Rule out Ear infection – Is he having any ear discharge?
Rule out Diarrhoea – Is he having any diarrhoea?
Rule out Urinary tract infection – Does he cry when he passes water?
Is he alert? Is he playing?

Past History
Is he having any medical illness? Is he taking any medicine?
How is his general health?
Was there any problem during pregnancy? What was the method of delivery? Was there any problem during delivery?
Can you tell me about his development milestone? Can you tell me about his vaccination schedule?

TELEPHONE CONVERSATION – FEVER

Introduce
Please can you give me your phone number and address, so that I can call you back if this phone gets disconnected?
HOPC
Look for following features if present arrange for face to face consultation as soon as possible

1. No response to social cues
2. Unable to rouse or if roused does not stay awake.
3. Weak, continuous crying, Grunting.
4. Reduced skin turgor.
5. Non-blanching rash.
6. Bulging fontanelle.
7. Neck stiffness.
8. Status epilepticus.
9. Focal neurological signs.
10. Focal seizures.
11. Bile-stained vomit.
12. Fever for >= 5 days.
13. Swelling of limb or joint.
14. A new lump > 2 cm.
15. Tachypnoea
16. Rule out – Meningitis, Ear infection, Urinary tract infection.

LOSS OF CONSCIOUSNESS / CONVULSION

History Taking: Fever

Open Question: Can you tell me more about the problem?
HOPC:

Write Nature of fits:
When, where, description of the fits, duration, who witnessed it?
Did he pass out? How long he was unconscious
Did he bite his tongue? Did he pass water? Did he jerk his limb?
Previous episodes

DD
CNS tumour – Is he having any weakness anywhere in the body? Is he having early morning headache?
CVS problem – Any SOB, chest pain?
Hypoglycemia – Has he had breakfast this morning?
Vasovagal effect – Was he standing for along time?

Past history – Was there any problem during pregnancy? What was the method of deliver? Was there any problem during delivery? Any medical illness? Is he taking any medicine? Does he play? Does he eat well? Is he up to date with vaccination schedule? Can you tell me about developmental milestone? Is there anyone in the family who is having similar problem?

UNCONTOLLED FITS

Mrs smith has come to your follow up clinic. Her 8 yr old son Roger has been suffering from epilepsy. Mrs Smith reports that he has been having frequent fits. Take history and discuss management

Introduction
Explain the purpose of the visit

HOPC:
When did he start having more fits?
Can she think of any thing that has changed at that time
Is the fit is of same type?
Progress?
Duration and type of fit

What might have caused worsening of symptoms?
Medication: Compliance
Changes in weight
Recent health problem
Other medication he might be taking

Treatment:
If no cause found then conduct investigation and consider increasing the dose of the medication

Bruise and Bleeding

Mrs Simpson has come to see you regarding her 5 yr old son Derek. Derek had a nose bleed 3 times this week and now she has notice bruises on his body

Introduction:
Explain the purpose of the visit

Open Question: Can you tell me more about the problem?
HOPC: Duration for both nose bleed and bruise
Onset: Can she think of anything that might have caused this? Recent infection, trauma
Progress: New spots appearing? Is nose bleed becoming more frequent?

Nature of nose bleed: Quantity, duration, how does it stop?
Bruise: Where? How big? How many?

Associated symptoms:
Water works? Any bleeding in urine
GI System: Any bleeding in stool
CNS: Any other changes notices in his behavior or activity
Recent vaccinations
Any recent infections

Past history – Was there any problem during pregnancy? What was the method of deliver? Was there any problem during delivery? Any medical illness? **Is he taking any medicine**? Is he up to date with vaccination schedule? Can you tell me about developmental milestone?
Is there anyone in the family who is having similar problem?

DD:

1. Bleeding disorders: (VIII and IX deficiencies, von Willebrand disease and idiopathic thrombocytopenic purpura (ITP))
2. Salicylate ingestion
3. Henoch-Schönlein purpura and other vasculitides
4. Mongolian spot
5. Leukemia
6. Aplastic anemia

Assessment of suitability for the surgery

8 yr old Gary suffers from diabetes. He had a fall and sustained fracture of his ankle. He need to undergo operation. Assess him for anesthesia. Take a brief focused history and discuss the management with mother.

Introduction:
Explain the purpose of the visit

Open Question: I would like to know about Gary's general health and diabetes to plan anesthesia and surgery

How long he has been having Diabetes
What type of insulin does he take and how many times a day. What is the dose
How long he has been taking the current regimen of insulin
Did he suffer from ketoacidosis in the past?
Was he admitted to hospital for any health problems
How is his sugar control?
Please tell us about his diet. Does he eat regularly, has he lost any weight?

Have you noticed any changes in his eating or drinking pattern?
Has been drinking lot of water?
Is his mouth dry?

Has he got any other health problem? Does he cough or have fever. Any problem with his bowels?
Did he vomit?

Plan: I need to examine him and will do some tests.
If all tests come back normal then we will plan for the surgery. Because he has got diabetes we need to take extra care that he do not develop complications. What we call as diabetic ketoacidosis.
For this we will have to give him insulin and fluids through the vein.

Vaginal Bleeding

6Yr old girl is complaining of vaginal bleeding. Take history from mother and discuss the management with the examiner

Introduction:
Explain the purpose of the visit

Open Question: Can you tell me more about the problem?
HOPC: Duration
Onset: Can she think of anything that might have caused this?
Progress: Is it getting better or worse

Nature PV Bleeding: Quantity, frequency, color, and foul smell

Associated with discharge: irritation, itch, swelling, bruise, pain and pain on micturation

DD
Trauma
Infection: Ask about diabetes and previous infections
Abuse: Who lives at home?
Behavior at home and school
Bleeding disorder: Bleeding from anywhere else, nose bleeds, bruises
Foreign Body: Pain, Swelling

Past History: Similar Problems in the past and any other health problems in the past
Any previous hospital admissions, any medications (Steroids)
Vaccinations, milestone, activity

Management: 1. always think of abuse especially if no cause if found.
2. Next step of management is to conduct examination and tests including Ultra Sound abdomen.
3. Need to inform health visitor and senior. Involve social worker if abuse is suspected.

Father is worried that his son might be having an ear infection
Talk to his father and address his concern

Introduction:
Explain the purpose of the visit

Many I know your concern please?
Explore his concerns; ask why he thinks, his son might be having ear infection

Explore the symptom: Duration, progress and nature:
For how long he has been having fever?
Is it getting worse?
Severity, what is his temperature?
Briefly ask history of fever

Rule out Meningitis – Is he having any neck stiffness? Is he avoiding bright lights? Is he alert?
Rule out Viral infection – Is he having any cold or cough?
Rule out Ear infection – Is he having any ear discharge?
Rule out Diarrhoea – Is he having any diarrhoea?
Rule out Urinary tract infection – Does he cry when he passes water?
Is he alert? Is he playing?

Thanks for the information; I feel that the likely cause for fever is _____
I will examine him to confirm this

Needle Stick Injury

IRRITABLE HIP

Mr Rutherford is father of Jack who is 4 yr old. Jack has been having difficulties in walking and is complaining of pain. You have carried out several test and all are normal.
Talk to Mr Rutherford

Introduce: Explain the reason for the visit and task
Explain the results of the test and likely diagnosis of irritable hip
Find out what does he know about the condition and what would they like to know

What is irritable hip?
Irritable hip is swelling (inflammation) of the membrane covering the hip joint.
It is the most common cause of hip pain in young children.
A child with irritable hip will have pain and restricted movement in their hip joint. The pain can also spread to the thigh, groin and knee areas. This makes standing and walking difficult and causes the child to limp. Usually, only one hip is affected.

What is the treatment / outcome / prognosis

The condition is often short lived and has no further complications. It usually goes away after one to two weeks. Usually we treat this condition by giving painkillers and rest for a week or two.

Will it affect the growth of the baby?

No it is short lived problem and will not affect his growth

Can it recur?

There are usually no complications and the condition very rarely returns. We recommend that Jack does not play sports or do any strenuous activity for at least two weeks after recovery. This is to reduce the chances of irritable hip returning.

SPACER

Explain how to use a spacer to Mrs. Gibson, mother of 3 yr old Jacob

Introduce
Explain the purpose of the visit
Explain what spacer is? A spacer device is a large plastic container, In children, co-ordinated breathing with medicine is not possible so we use a spacer.
Show Spacer

Explain the following step with demonstration

Show parts of the spacer: Spacer is usually in two halves It click together to make a container. At one end is a mouthpiece and at the other end is a hole for inserting the mouthpiece of the inhaler
Explain following steps of using spacer with demonstration

1. Remove the cap from the mouthpiece of the inhaler and shake the inhaler vigorously.
2. If the inhaler has not been used for a week or more, spray it into the air before it is used to check that it is working.
3. Attach the mask to the mouthpiece of the spacer.
4. Insert the mouthpiece of the inhaler into the hole in the end of the spacer
5. Place the mask over the child's nose and mouth so that it makes a seal with the face.
6. Press down on the inhaler canister to spray **ONE** puff of medicine into the spacer.
7. Hold the mask in place and allow the child to breathe in and out **NORMALLY** for five breaths.
8. If you need to give another dose, wait 30 seconds,
9. Don't spray more than one puff at a time into the spacer. (This makes the droplets in the mist stick together and to the sides of the spacer, so the child actually breathes in a smaller dose.)

Ask mother to show you how she would use
Ask any questions she might have

Why is a spacer given to my child? In children, co-ordinated breathing with medicine is not possible so we use a spacer.
A spacer makes a noise, what is this? It is the noise of the valve. Noise indicates that the valve is fine and the spacer is ok to use.
When to change spacer – Whenever any scratch marks appear or any breaks, then please change it. It is advised to change the spacer after 6 months

How to clean spacer – Your spacer should be cleaned once a month in warm soapy water to prevent build up of medicine residue on the inside. It should be left to drip dry rather than dried with a cloth.

SPLENECTOMY & FEMORAL SHAFT

Talk to Mrs Smith mother of 8 yr old Roger. Roger met an accident and investigation reveal that he has rupture spleen and fracture femur. Your consultant has advised surgery due to severe internal bleeding.

Be gentle and sensitive. Make sure that the patient is comfortable
How are you? We have results of the test and would like to discuss with you. Would like some one to be present?
I am sorry to inform you that your child has ruptured his spleen along with a fracture of the long bone in his leg.
Since the ruptured spleen is bleeding heavily and continuously, we will have to take it out. This procedure is called splenectomy.
Do you know about this procedure?
Spleen is an organ present in the left upper tummy. It is a fighter gland against bugs. It protects against infection.
We can not preserve the spleen. Because of the severe bleeding his life is at risk.
Following splenectomy He can live a normal life but certain precautionary measures are needed.
The spleen is one part of the immune (defence) system. Other parts of the immune system protect against most bacteria, viruses, and other germs. The risk of some serious infection increases following removal of the spleen. This risk can be managed by taking antibiotics and jabs.
From time to time he should take jabs against bugs like Pneumococcus Haemophilus influenzae.
He has to take a small dose of antibiotic through out his life, usually it is penicillin. This small dose may not cause any side effects. At all times you should have broad spectrum antibiotic. So that, whenever he has any infection you can start without any delay before visiting your GP or hospital.
Avoid visiting countries where malaria is present. If at all, he is going then he should take prophylactic anti malarial medicine, along with mosquito repellent and a mosquito net.
Can he go abroad? Yes he can go, but before going please consult you GP.
Will it affect the growth of the child? Certainly not, if the above mentioned advices are followed. Let him wear a bracelet which will tell that he has no spleen.
Is it necessary to take out the spleen? Unfortunately yes, otherwise it will be a problem as it is bleeding heavily.

Do you have any questions?

MENINGOCOCCAL SEPTICAEMIA

In PLAB exam, the moment you enter the cubicle, the actor will and ask you "What has happened to my son?" He is worried and anxious to know the results.
In this case, ask him to take a seat and introduce. Clearly explain the purpose of your visit (I have come to discuss the results of the test and treatment options)

Your child has got a condition called meningococcal septicemia.
It is an infection of the blood, caused by a bug. It has infected the lining of the brain as well. This is a serious infection and immediate treatment is required.

Intensive care is often needed at first as the infection often causes shock and problems throughout the body. It is likely that fluids will need to be given directly into the veins (a drip). Oxygen is also often given through a mask on the face. Antibiotic injections will be given to control the infection.

Steroid injections are also sometimes given. These work by reducing some of the inflammation that occurs with meningitis.

Will he die? It is a serious infection and requires intensive treatmet. Outcome depends on how early treatment is given and response to treatment. Most people make good recovery when treated early

Can I visit him in ICU? Yes. Can I stay with him in ICU? No. Do I need to wear a gown, gloves, cap and mask? Yes. Are you going to give family members prophylactic medicine? Yes. What about school mates? Yes, I will inform the public health department. They will come and assess and then they will decide whether friends and school mates need it or not.

What are the complications? Chances are that he may not have any problem. Sometimes, some children are having hearing problems and others can have behavioral problems. Learning a disability is also a complication. Some times they can have joint problem and fits.

Do you have any questions? Thank you

CHILDHOOD OBESITY

Take history and do the counselling.
Causes – Constitutional, Drugs, Hormonal, and Dietary.
Can you tell me more about the problem?
What was his birth weight? What is his present weight and height?
How long has he been having this problem for? When did he start putting on weight? Gradual or speedy? Can you tell me more about his dietary habit? How much does he eat? How many times a day does he eat? What doe he eat? Does he like to eat sweets, chocolates and fried food?

Is he having any medical illness? Is he taking any medicine? Has he had any surgery in the past? Is there any one in the family who is having similar problem? Is there any disease which runs in the family?
Was there any problem during pregnancy? What was the method of delivery? Was there any problem during delivery? Can you tell me about his development milestones? Is he up to date with vaccination schedule? Does he play? Does he go to school?

Ask for growth chart and use growth cart to assess his weight.
From the history, I think he is overweight because of _____
If he has problems with diet then refer him to pediatric dietician and inform health visitor for monitoring the progress
The best medicine for weight management is diet control and exercise, so encourage him to play as much as possible.

PLAB Right Limited

2 to 20 years: Boys
Stature-for-age and Weight-for-age percentiles

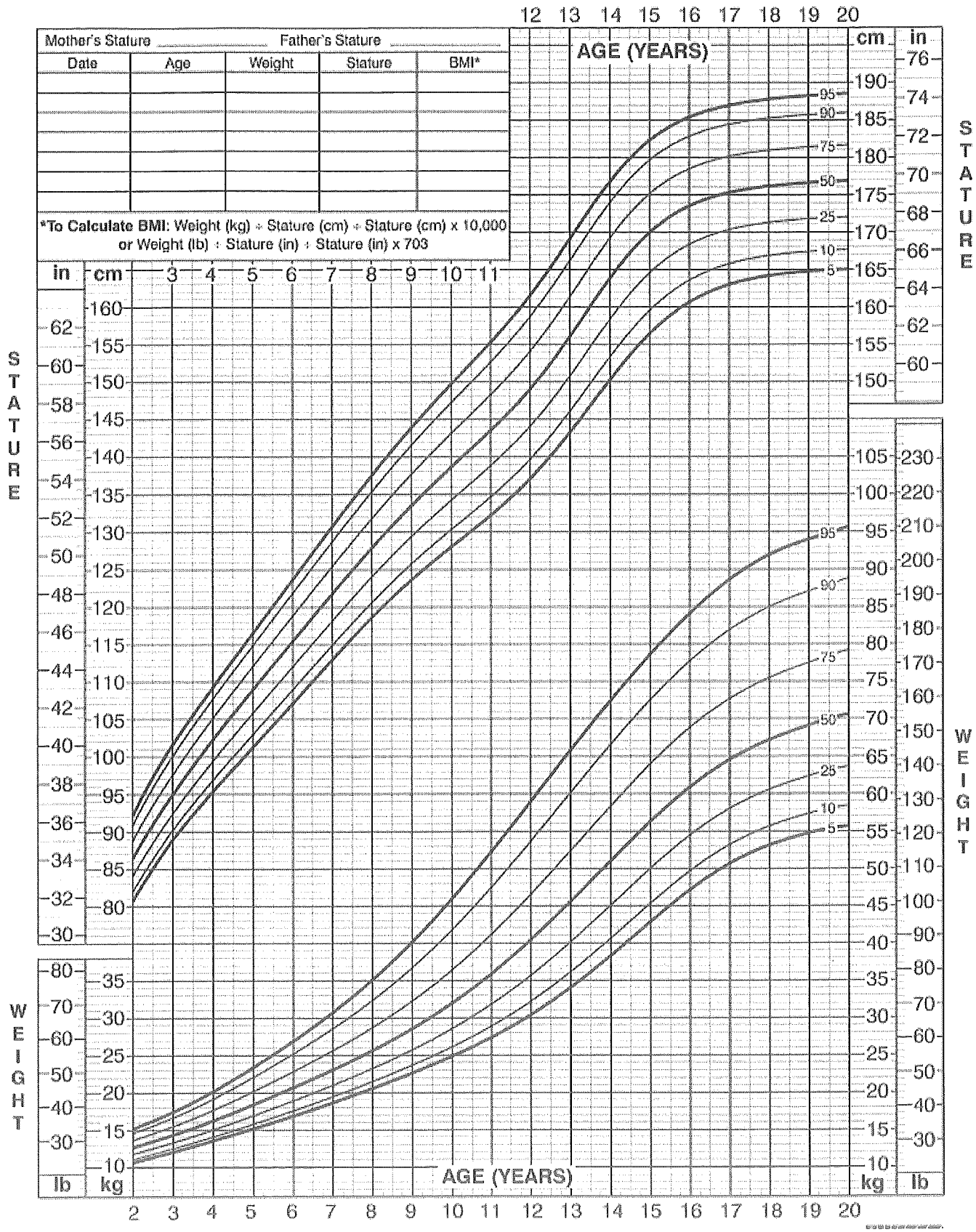
NAME _____

RECORD # _____

Mother's Stature _____ Father's Stature _____

Date	Age	Weight	Stature	BMI*

*To Calculate BMI: Weight (kg) ÷ Stature (cm) ÷ Stature (cm) x 10,000
or Weight (lb) ÷ Stature (in) ÷ Stature (in) x 703



DOWNS SYNDROME

Mrs Richards has been told that her baby has downs syndrome. Talk to her address her concerns (Mother knows that child has Down syndrome. Do not break the bad news. Do the counseling)

Introduce and explain the purpose of the visit
Find out what are her concerns and knowledge

Explain downs: Down syndrome is a genetic condition in which there is an extra chromosome. Instead of having 46 chromosomes, your son has got 47 chromosomes. This extra chromosome can come from either father or mother.
Chromosomes contain blue prints called genes. These genes give different characteristic features to a person.

What are the problems which can happen to my child?
Well, it is too early to predict. However, he may or may not have some problems like heart problem, bowel problem, and mental health problems. From time to time we will examine him. If any problems are there, we will manage them accordingly. Everyone with Down's syndrome will have some degree of learning difficulty. However, the level varies from person-to-person. Delayed speech development and delay in motor development can occur. Your child will eventually learn to do all of these things but they may just take longer than a child who does not have Down's syndrome. Someone with Down's syndrome will tend to have a lower than average IQ.

What is the outcome?
Life expectancy is improving due to better detection of medical problems and advancements in medical treatments. At least half of people with Down's syndrome now live into their 50s and 60s.
Does he need to go to special school? Yes, special schools are meant for mentally challenged people.
What benefits can I get from the government? For this, you will have to contact social services.

DIABETES

Urine test reveal ketones, Child has diabetic ketoacidosis. Talk to the father Mr Mathew and discuss the management

Introduction
Introduce and explain the purpose of the visit
Find out what are her concerns and knowledge
Explain the diagnosis: Test show that your child suffers from Diabetes. Currently he is going through complication of diabetes, called ketoacidosis.
Have you got any questions?
Diabetes is a common condition in children. This condition occurs due to deficiency of insulin.
There are two types of diabetes. One in which there is lack of insulin and second, variety of diabetes insulin is present but cells are not able to use it.
Your child has got type 1 diabetes. This is seen in children and is caused due to the lack of insulin. The only treatment available for this is substituting the insulin. Insulin can only be administered in injection form. Given as a superficial injection to the fat under the skin. This injection can be given by family members or patient themselves using insulin pens. These are easy to use.
Insulin is needed for the body to use (burn) carbohydrates (sugar) to produce energy. Excess of insulin can drop the sugar level and cause loss of consciousness. This is a serious condition called hypoglycemia. Lack of insulin can cause raised sugar and weakness. It is important to monitor the sugar level on a regular basis and take regular steady diet to maintain the sugar level.

At the moment your child has got diabetic ketoacidosis, which is one of the complications of uncontrolled diabetes. It is a serious condition and we will have to admit him. We will take some blood tests and we will give him fluid. When he is about to be discharged, I will refer him to a dietician and diabetic nurse. She will teach him how to inject insulin under the skin.
She will also teach you how to monitor glucose level in the body.

How to recognise HYPOGLYCAEMIA

1. Light headedness
2. Sweating
3. Palpitation
4. Tummy pain
5. Headache
6. Drowsiness

Whenever he says the above mentioned features, then please give him a sugary drink.
If he is drowsy but airway is patent then apply hypo stop. Hypo stop is a concentrated form of sugar. Put between teeth and cheek and then rub it.
If he is unconscious, then we will give one injection called glucagon. Glucagon is given in the muscle, it is very easy to use and we will teach you. Then bring him to hospital.

Child is having recurrent attacks of hypoglycaemia. Take a brief history and discuss the management.

Can you tell me more about the problem? Can you tell me the dose if insulin? Have you injected excess insulin by mistake? Does he take meals on time? Has he missed any meals? ? Is his blood sugar level well controlled? Is he having any medical illness at the moment is he taking any medicine?
Usually it occurs due to lack of food, due to any illness or rarely due to accidental over dose of insulin.
Then describe hypoglycaemia as above

TREATMENT OF UTI

Your son has got urine infection. We have identified the bug in his urine. We can successfully treat this condition by giving antibiotic tablets. We will also take a scan of the kidney, to find out any problem he may be having. We will not stop antibiotic till we are sure that there is no structural abnormality. The structural abnormality of the kidney can be detected by a special dye test called micturating cystourethrogram. This test will tell us about the backward flow of water from the urine tube to kidney.
If two MCU are negative then we will stop the antibiotic.
Can kidney be damaged by first water infection? Chances are there, that's why we are going to do a scan of the kidney and other tests to make sure everything is fine.
If there is any structural problem in the urinary system, what will you do? We will treat it most probably by surgery.

SCABIES

Take a brief focus history and do the counselling.
Can you tell me more about this problem? How long has he had this problem for?
Which part of the body is affected mostly? Does he itch all the time? Have you noticed any burrows in the hands and groin? Is he having fever? Is he having any pus in the affected area? Have you noticed any scabs? Is there anyone in the family who is affected? Has it affected him before? Has he been aboard recently?
Your son has got a condition called scabies. This is caused by an insect. This insect is not visible to the naked eye. This insect lies on the skin. The insect makes burrows in the skin and in the burrow they lay eggs.
This is a curable condition. In the treatment of scabies we are going to treat him as well as the whole family, even if family members are not having any symptoms.
Scabies is a common condition. It spreads from one person to another. It commonly occurs in children and young adults.
After taking a bath with soap and scrubbing of fingers and nails. Apply antiseptic cream all over the body from neck to sole. Wash the cream after 24 hours. Use new bed sheets and pillows.
Sometimes itching may increase for a few days. If it increases, we will give you another cream, this will provide relief. Itching disappears after a few days. Please avoid eye contact with this cream.
Rarely, may we have to use medicine in recurrent scabies.

ASTHMA

It is a common condition in which, shortness of breath occurs due to foreign body's inhalation. The foreign bodies which cause this problem are known as allergy. Anything can be an allergy, even house dust, animals, perfumes etc.
When this allergy enters the breathing system, it constricts or narrows the airways, which causes SOB.
Mostly, symptoms become worse in winter season.
Why does this happen? Through genetic factors plays a role, but exact cause is not known. Can he grow out of it? Some children do grow out of it. Can it become serious? In one third of children it may become a serious issue in adulthood. In the remaining two thirds of children it becomes a mild asthma.

INHALERS
Life style modification

1. Ask him to wear bracelet
2. Take medicine regularly
3. Avoid pets
4. Avoid house dust

CEREBRAL PALSY

This condition occurs whenever there is an injury to the brain. Injury can occur on delivery or before a bath. Signs and symptoms of cerebral palsy are non progressive. In this, child can have difficulty in walking and maintaining balance.
Child can have learning disabilities along with epilepsy.
Other symptoms which are seen in cerebral palsy are -:

1. Speech problem
2. Hearing problem
3. Delayed walking
4. Weaknesses of arms and legs etc

Well this is a treatable condition but not curable.
A team work of ortho paediatricians, Physio management, occupational therapist, orthosis experts are required.
Orthosis expert will provide orthosis to prevent deformity.
Orthopaedicians will correct any deformity.
Occupational therapist will make necessary changes in home so that he can live comfortably.
He may have to go to special schools. I will introduce you to social services so that they can talk more about practical issues.
From time to time we will assess him. We will set a realistic milestone goal for him.
If there is anything you want to know or if he is having any problem, please let us know.
Do you have any questions? Thank you

FEVER

Child has got URTI. It is due to nerves. Father thinks that it is meningitis, he wants antibiotics. Talk to him.
Can you tell me more about the fever? When did it start? Have you measured the fever? Has he had this problem before?
Rule out Meningitis – Have you noticed any rash? Is he drowsy? Is he having any headaches? Is he having any neck stiffness? Does he avoid bright lights? Does he have a cough? Does he have nasal discharge?
From the history it seems that he has got a viral fever. This type of fever is treated by medicines called antipyretic. In this fever there is no need of antibiotics. Antibiotics are effective against bugs called bacteria. These fevers are usually self limiting and disappear after a few days. But if you see anything unusual, please contact us.

NAPPY RASH

this is a fairly common condition. This occurs mostly in the age group of 6-9 months.

It occurs due to ammonia in urine. The affected area appears red and this condition causes discomfort.

The area which is caused by nappy is affected.

What is the treatment?

Follow these simple steps and the nappy rash will disappear within a few days. The steps are -:

1. Keep the nappy area dry
2. Expose bottom 4-5 times a day
3. Look at the nappy from time to time
4. Please avoid biological detergent
5. At the same time, do not use tight fitting pants
6. Please do not use plastic pants
7. Use barrier cream like castor oil, zinc oxide or sudacream as advisable.

If suppose this is not disappearing, please consult us or your GP.

FEBRILE CONVULSION

This is fits that occur due to high temperature.

Why him?

This is difficult to answer. It can happen to any child, through genetic plays a role.

Will if affect the growth of the child?

No, not at all

Can attacks occur again?

Chances are there. If he has fever he may have fits. Whenever he is having a temperature, please give him paracetemol tablets. Keep the surrounding cool, please do liquid sponging till your up

Can it cause damage?

No, but if it persists for more than 30 minutes then chances of brain damage are there.

What should I do during attacks?

Do not panic. Be cool and calm. Fits do not cause pain and discomfort to the baby. Do not interfere with the fits

COELIAC DISEASE

The gut reacts abnormally with gluten. Gluten is a protien which is present in rye, wheat, oat, and barley. The gut thinks that gluten is a harmful substance and reacts to it like reaction to infection from organisms like bacteria or virus. Due to this inflammatory reaction the small tube like projections present in the lining of the gut, called villi, which are responsible for absorption, are lost and absorption of food is affected.

Why does it happen?

The exact cause is not known. But is triggered due to sensitivity to Gluten

Can it happen to his brother?

Will affect the growth of my child?

A gluten free diet will ensure normality and development.

Which foods should be avoided?

Coke, pasta, bread. I will refer him to a dietician and they will be able to tell you in more detail. Gluten free food products are available in almost all supermarkets.

Can he eat gluten occasionally?

No, not even the smallest amount of gluten in his life time.

What are the complications?

Complications only occur when gluten free diet is not maintained. Below are the following complications-:

1. Anaemia
2. Thinning of bone
3. Failure to thrive

PEANUT ALLERGY

Mr Jefferson is 3 years old and he has had a reaction to peanuts. Talk to mother regarding the diagnosis and management. Mothers name is Katie.

An allergy occurs when your body's immune system, which normally fights infection, over-reacts to a substances they are not actually harmful Allergic reactions to allergens can vary from mild to life-threatening.

Both peanuts and tree nuts (for example, walnuts, hazelnuts, almonds, cashews, pecans, brazils and pistachios) can act as allergens, and can cause an allergic reaction in some people. Allergic reaction causes the tiny blood vessels of your body to leak fluid which causes the tissues to swell. This results in a number of different symptoms.

What are the symptoms?

Various types of symptoms can occur like slim reactions, itching and sometimes respiratory symptoms such as runny nose. Sneezing can also occur. At the same time potentially life threatening respiratory symptoms can occur like wheeze and shortness of breath.
Reactions can also affect the cardiovascular system in which blood pressure will be dangerously low. This is called anaphylactic reaction.

How do I deal with a peanut allergy?

The best thing is to avoid peanuts all together.
Wear a medic alert bracelet which will tell little Jefferson has a peanut allergy.
If he develops severe peanut allergy, please bring him to hospital urgently.
I will give you 3 epipen, one for school, one for home, and one for spare use. Please inform school about this. The injection is very easy to use. It is like a pen, you have to press the button when you want to use it. Our allergy specialist nurse will tell you about this in more detail.

In case of a mild reaction, Take an antihistamine tablet as soon as possible. You can buy these at pharmacies or get them on prescription. They usually take 15-30 minutes to start working.

In Severe reactions:

- If you have an adrenaline injection pen, use it.
- Get help and call an ambulance straightaway. If possible, always have someone with you if you are having a reaction, even if you are being sick and need to go to the toilet.

Infantile Colic

Mrs McKenzie is worried about her 2 months old John who is crying excessively. You have carried out examination and investigation and all are normal. Inform mother about infantile colic

Greeting, Introduction

I have come to discuss about the outcome of the tests and how to help John

Understand patient's knowledge and concerns.

May I know any concerns you have?

Explain the results: All tests that we have carried out has come back as normal.

Explain Colic

Colic is inconsolable crying in a healthy newborn baby. The condition has no known cause but is harmless and is not progressive.

The cause is not known. The term 'colic' is used as it is thought the baby has pain in the abdomen (tummy). This may be so, but the cause of the pain is not clear.

Treatment?
Reassure, that Baby is well. Reassure that baby will grow out of this condition and will cause no harm to baby.
Simple steps to sooth the baby may help
Support to parents may be needed
No evidence for the use of any medications
simethicone drops and Infacol are tried by parents but there is no evidence
General advice to the parents may be all that is needed in terms of feeding regimes, temperature of the child's room, clothing worn by the child, together with an explanation of the likely course of the condition. Parents may be advised to share childcare with each other and friends/grandparents until this stage is passed in order to prevent physical/mental exhaustion.
There is some evidence to support the substitution of cow's milk with soya milk, casein hydrolysate milk or low lactose milk.

Newborn John is 3 weeks old and is having severe jaundice. There were no causes found, and is probably newborn jaundice. Jaundice is not getting better with phototherapy. Your consultant has advised exhange transfusion. Talk to the father, Mr Smith. Mr Smith is a jehovah's witnesses and is against blood transfusion.

Task: Consent taking

Introduction:

- Explain the purpose of the visit
- Find out what they already know
- Address any of the concerns they may have
- Find out if they wish to have some family member present while you discuss about the next step of treatment.

Explain the current clinical situation if father is unaware of it
Jaundice is a common condition in newborn babies that causes yellowing of the skin and the whites of their eyes. Jaundice is caused by the build-up of Bilirubin in the blood. Bilirubin is a yellow substance produced when red blood cells are broken down.

Explain current clinical problem and potential complication
Some time it becomes severe and prolonged and can cause some serious irreversible damage to the developing brain. This can lead to problems like hearing loss, epilepsy, mental retardation and weakness. It can also become life threatening.
After listing the potential complication, find out if father has understood them and ask if he has any questions

Discuss about the next step of the treatment
We usually treat this condition by phototherapy. The light therapy reduces the Bilirubin in blood. Unfortunately in John's case, phototherapy has not been effective.

My consultant has therefore advised exchange transfusion. The procedure involves slowly removing the patient's blood and replacing it with fresh donor blood

Ask if they have any concerns or questions
Father will say that they are Jehovah's witnesses and blood transfusion is not allowed.
Explain the importance of the procedure and the fact that other treatment has failed in controlling the jaundice

If he still refuses

I will speak to the consultant and Jehovah's Witness's hospital liaison representative and will get back to you as soon as possible. Thanks for talking to me.

LAW: For your information only, do not have to use this in the station

If urgent: In cases of children, blood transfusion can be carried out for life saving if all other treatment has failed
If non urgent, in cases of children, matter should be taken to the court of protection for a decision.

Mrs Dixon is 32 yr old. She is concerned about giving MMR vaccination to her 9 month old son John.

Address her concerns

MMR COUNSELLING

1. Greeting/Introduction
2. Checks identity of patient
3. Empathy
4. Explains purpose of visit
5. Elicits beliefs and concerns
6. Explains MMR vaccine
7. Explains mode of administration
8. Age of Administration
9. Explains briefly about dangers of Mumps, Measles and Rubella
10. Explains about side effects
    a. Fever, pain
    b. Mild form of measles(rash -1week)
    c. mumps (3-4 weeks)
11. Addresses concerns about Autism correctly
12. Addresses concerns about bowel disease
13. Importance of combined vaccine
14. Gives opportunity to ask questions.
15. Gives opportunity for follow up appointment
16. Established an attentive, and non-judgemental relationship
17. Summarised and clarified understanding
18. Gives leaflets
19. Thank patient

Instructions to the actor:

1. Is it safe?
2. I have heard that this vaccine causes autism
3. What will happen if John do not have the vaccine

What does MMR mean?

MMR stands for measles, mumps and rubella. These are three different diseases which are caused by three different viruses. The vaccines used to immunise against measles, mumps and rubella are all combined into one injection - the MMR vaccine.
The first dose of vaccine is usually given at about 13 months A second dose is usually given aged 3-5 years

Most children are perfectly well after having a dose of MMR vaccine. However:

- Some children develop a mild fever (temperature) and a faint rash 7-10 days later. This should only last for 2-3 days and is of no concern.
- A few children develop a mild swollen face (like a mild form of mumps) about three weeks later. Any swelling will gradually go down.

Neither of these reactions is infectious or serious. If necessary, you can give paracetamol or ibuprofen to ease pain and fever. Serious reactions are very rare. Any reaction to the vaccine is much less after the second vaccine is given.

MMR, Autism and Inflammatory Bowel Disease
Recently there has been speculation that the MMR vaccine may somehow cause autism or inflammatory bowel disease. Recent large studies have all concluded that there is no evidence to link MMR immunisation to either of these conditions
6 Yr old Maria is brought to the clinic by her mother Mrs Thompson. Mrs Thompson reported that Maria had a fall this morning while she was playing with her 8 yr old

brother. She was seen by the A & E and on examination there was tenderness and swelling of RT leg. There were no bruises. X- Ray revealed the fracture of Right femur. You are Orthopaedic SHO

Non Accidental Injury

NAI – this comes in 3 ways

1. Child, 6 months old, has got burns on face and buttocks. Take history from mother.
2. Child, 9 months old has got fracture femur. Take history from mother.
3. Child, 9 months has got fracture humerus shaft. Examiner will show you x-ray of humerus and C&R Which will show multiple calluses? Read the x-ray, and tell the probable diagnosis and talk about management.

History- How did child sustain Injury? Find out how, where when?
What happened after the injury?
Find out the time line. What time did he sustain injury? When did u come to hospital

Childs general Health
Childs behavior at home
Progress in School
Current domestic situation: Who are residing at home
Similar injuries in the past
Detailed history of Birth and growth
Planned pregnancy
Family History of Bleeding
Social history: How many children
Ask senior help
Insist on admission if you suspect NAI
Thank

Instructions to the actor:
Maria had a fall while paying with her brother. No one else was there at the time. You did witness the fall. You are the biological mother. Maria's father does not live with you.
Maria had a fall this morning at 9.00 am and you have brought her to the hospital only at 6.00 pm. You do not give clear answer as to why there was a delay (Give this piece of information only if the candidate asks you about this)

Psychiatry

History				
Alcohol				
Substance Misuse				
Post Natal Depression /Blues/ Psychosis				
PTSD				
Suicide Risk Assessment				
Anorexia Nervosa				
Insomnia				
Counselling				
Amitriptyline				
Paroxitine				
Examination				
Mini Mental State Examination / Cognitive Assessment				
Mental State Examination				
Capacity Assessment				
Mock Test				
Depression				
Anxiety (Generalised Anxiety Disorder, Panic Disorder, Phobia)				
OCD				
Psychosis				

Alcohol History

1. 46 Yr old man has been drinking excessively. He now wishes to get some help with drinking. Talk to him

2. 34 yr old Mr Smith has been drinking excessively for last 6 months. Take history and discuss management

3. Mr Rutherford got admitted to hospital for abdominal pain. Endoscope results shows multiple gastric erosions. He has long standing alcohol problem. Take alcohol history and talk to him about further management.

4. Mr Smith is 46 year old admitted for in growing toe nail procedure. His MCV is raised and has low HB. Screen for alcohol problem and advise management.

History:
Open Question: Can you tell me more about the problem?
In 3rd and 4th Scenario, there is no presenting problem, so you may have to ask an open question. The 4th Scenario is a case of suspected alcohol problem. 3rd Scenario is of confirmed alcohol problem.

HOPC:
Duration: Duration of normal use of alcohol, harmful use of alcohol and alcohol dependency syndrome
Onset: Circumstances around alcohol problem (Dependency syndrome)
Progress,
Nature of symptom

What drink, how much, how often, pattern of drinking over the day (drinking as soon as waking up) what happens if he does not drink, any help received for this problem. Why did it fail? When was the last time he stopped drinking?
Are you having any shakes now?

Associated symptoms:
Drug use
Mental health: Depression, Anxiety, PTSD, Memory problem
Physical health: GI and Neurological problem
Seizures or confusion in the past

Social History
House, support, finance

Forensic History
Any problems with law

Management:

Acute: Alcohol detox. This can be done in community if the patient does not have any complications. If there are physical health, mental health problems, lack of support then hospital admission is indicated. Detox is done using Chordiazopoxide and is given over a period of one week.

Long term: Long-term management includes, counselling, Group Therapy and Alcohol Anonymous

Scenario Specific

1. Simple history as above
2. Short history of alcohol problem, usually is a secondary alcohol problem, due to PTSD, Depression, Grief, sleep problem or pain. Management plan should include the management of underlying illness
3. Here patient shows little insight to the extent of alcohol use and the effect it has on his health. You should use probing style of interviewing to get an accurate measure of the problem. Management is same as above. Avoid giving unnecessary advise on harmful effect of alcohol.
4. This is a case of accidental finding of abnormal blood results, suggesting alcohol problem. In this scenario, you need to use probing style of interviewing and paying particular attention to his current alcohol use, withdrawal symptoms and history of previous DT (delirium tremens). Management should include detox prior to the surgery if he is dependent on alcohol.

Alcohol Problems

1. Normal use of alcohol
2. Harmful use of alcohol: Excessive drinking has caused some problems to the individual. This can be physical, mental, social, financial or occupational problem. Management is advice and group therapy.
3. Alcohol dependency syndrome: This is a case of alcohol dependence where an individual is addicted to alcohol. Drinks on a daily basis, starts drinking in the morning and experiences withdrawal symptoms if does not consume alcohol. Initial management is detox usually in the inpatient setting with cholordiazopoxide. Usually takes 1 week for detox. Maintenance programme (group therapy) to avoid relapse

Drug History

38 yr old Mr Brown wants help to stop taking heroin.
Talk to him

History:
Open Question: Can you tell me more about the problem?
HOPC:
Duration:
Onset: Circumstances around the time when he stated to take drugs
Progress
Nature of symptom

> How much heroin/opiates does he take? How does he take? (Inject or inhale)
> If inject (how long, where, how often, does he share needles, where does he get the needle from, how is the injection site
> What other drugs do you take? How often?
> Have you tried to stop before? Why did it fail?

Associated symptoms:
Alcohol use
Mental health: Psychosis, Depression
Physical health: Phlebitis, Hepatitis, HIV

Social History
House, support, finance

Forensic History
Any problems with law

Management:

Maintenance therapy: Substitute the drug with Methadone. First have to do a urine test to confirm the drug use and then prescribe methadone.
For pregnant woman, advise to continue methadone and there is no risk to the foetus apart from the withdrawal symptoms baby can experience on delivery. If she stops taking drugs suddenly there will be a risk of miscarriage.

Management of non opioid drugs (cannabis, cocaine, LSD, amphetamine) is supportive counselling, group therapy and education.

Mental health problems in post natal period

32 yr old Mrs Gibson is complaining of feeling low. Talk to her

28 yr old Mrs Scott is feeling anxious and acting bizarre in the ward. Take history

History:
Open Question: Can you tell me more about the problem?
HOPC:
Duration:
Onset:
Progress:
Nature of symptom

Ask appropriate history of presenting complaint (Anxiety / Depression)

Symptoms of Depression:
Anhedonia: have you lost interest in the activities you used to enjoy in the past
How is your sleep?
How is your appetite?
Do you feel worthless, guilty or hopeless?
Do you feel suicidal?
Have you ever thought of harming the baby?

Symptoms of anxiety
Can you relax? If not, why is she feeling anxious?
Explore the reasons. She may be anxious due to fear (Delusion).
Explore the fear to find out if it is a false fear. Check for the conviction of belief.
Do you hear voices when no body is around?

Other Associated Symptoms
Did you experience panic attack?
Do you wash or check excessively

Pregnancy
Was it panned?
How was your pregnancy?
How did labour go?
How is your child?
Is he breast fed?
Are you coping with the demands?

Past history
Medical and Psychiatric

Family history and Social History

Post natal Blues: Onset in the first week of post natal period. Feel low and anxious. Do not have any serious symptoms like suicidal ideas. Management: Reassurance. This is physiological and they do not carry risk of getting depression.
Post Natal Depression: Usual time of onset, 4 weeks following the delivery. May feel suicidal and if they, need hospital admission
Post Natal Psychosis: Usual time of onset, 2 weeks following the delivery. Symptoms: hear voices, extreme anxiety and may have thoughts of harming baby. Need hospital admission

PTSD

32 yr old Mrs Thomson, is referred by his GP. He met with an accident 3 months back and has lost his wife in the accident. He feels anxious. Take history and discuss the diagnosis with examiner

History:
Open Question: Can you tell me more about the problem?
HOPC:
Duration: After how many days of the accident did you start noticing the problem?
How were you before the accident?
Progress
Nature of symptom

Severity (Ask her to rate from 0-10)
Do you get panic attack?
Flash back: How often,
Nightmares: how often
How has this affected vour life?

Associated symptoms:
How is your mood?
Have you come to terms with the loss of your wife and accident?
If he has not come to terms ask, have you accepted the loss? How do you feel about it?
Do you hear voices when no body is around?
Do you wash or check excessively
Have you been drinking more than usual?
Do you feel suicidal?

Past history
Medical and Psychiatric

Family history and Social History

Diagnosis:
If this patient feels depressed, Depression will be the primary diagnosis. PTSD will be the additional diagnosis

Suicide Risk Assessment

32 yr old Mrs Clark, took 25 paracetamol tablets last night. She received the treatment in one of the medical ward and now deemed as fit for discharge by the medical team. You are junior doctor on call, and have been asked by the medical doctor to see Mrs Clark.
Conduct RISK assessment and discuss the management plan with the patient

Question may also ask you to discuss the management with the examiner

History:
Introduction:
Open Question: Can you tell me more about the incident

Circumstances of the overdose
What happened? Description of the event
When? (Time line of all significant events of the day, including arriving to hospital)
How? (Understand the method of suicide in detail. Pay attention to minor details.)
How did she reach hospital?
Why? (Reason for taking overdose, this is important. There will always be a reason)

Current situation
How do you feel now?
How do you feel about the incident now?
Do you have suicidal ideas?
If yes, know about the plans and intention

Psychiatric History:
How is your mood? Explore positive symptoms
Can you relax?
Do you hear voices when no one is around?
How much do you drink?
Do you take any drugs?

Past History:
Have you attempted to harm yourself in the past
Get the details
Do you suffer from any mental health problems?
Do you suffer from any medical problem?

Management:
If risk is high, admit the patient. If refuses, request the patient to wait and consult your senior
If there is no clear risk, you need to describe the risk by listing risk factors and protective factors. Management is to get further information by consulting her relatives, read medical notes and you also should discuss with your senior
It is difficult to say there is no or less risk. You have to do extended assessment to reach that conclusion

Anorexia Nervosa

17 yr old Miss Scott, is referred by her GP. Miss Scot's mother is very concerned about the weight loss. Take history from Miss Scot and discuss the diagnosis with the Examiner

History:
Open Question: Can you tell me more about the your mothers concerns
If Laura does not feel that weight loss is a problem, then it rules out medical causes of weight loss. You need to see if this is a normal pattern of intentional weight loss or pathological.
*Find out her current weight and height**
What was your previous weight? How much weight you have lost and over how long
How did you manage to loose weight?
What do you think of your current weight? * If you wish to loose, how much you would like to loose.
How are you planning to loose this weight?
Do you avoid eating fattening food? *
How are your periods? * When did it stop? Are you pregnant?
Do you think of food excessively? *
Have you made your self sick? *
Do you take any medication to help you loose weight? *
Do you exercise regularly?
Do you binge eat? How often, for how long?
Psychiatric History
How is your mood?
Do you hear voices when no body is around?
Do you feel suicidal?
Can you relax?
Complication of weight loss
Do you feel tired easily?
Did you have any falls?
Do you feel dizzy at times?
Were you hospitalised for any health problems in the recent past
Do you suffer from any heart conditions?
Did you ever have seizures?
How is your general health?

Family history and Social History

* Criteria for diagnosis of eating disorder

Eating Disorders:
Anorexia Nervosa:
1. BMI less than 17
2. Avoids eating fattening food
3. Amenorrhoea
4. Altered body perception

Bulimia Nervosa
1. Normal Weight
2. Preoccupation with food
3. Induces vomiting or taking laxatives/ diuretics
4. Altered body perception

Binge eating disorder
1. Binge eating.

Insomnia

56 Yr old Mr Whalley referred to your clinic because he is finding it difficult to sleep for last 6 months. He also suffers from rheumatoid arthritis. Talk to Mr Whalley, Mr Whalley is currently taking Zopiclone 7.5 mg Nocte and Ibuprofen 400mg TDS.

History:
Open Question: Can you tell me more about the sleep problem
Onset: How did it start? Can you think of anything that might be causing this problem? Did anything change around that time?
Progress:
Nature of symptom

Problem going to sleep, maintaining sleep or waking up early?
If problems are related to going to sleep: What time does he usually go to bed, after how many hours he manages to sleep. Does anything bother him when he tries to sleep?
Problems with maintaining sleep: what time wake up in between and how many times, is there a pattern?
If wakes up early: How many hours early.

How many hours he can sleep?
How does he feel in the day time?
Is it every night? Or how often? Does anything make it worse?
How has this affected his life?

Associated symptoms:
How is your mood?
Anxiety
General health
Heart and lung conditions
Hormone including thyroid problems
Drug and alcohol use

Past history
Medical and Psychiatric
Medications

Family history and Social History

Differential Diagnosis:
Initial Insomnia: Anxiety or sleep hygiene (coffee, cigarette, alcohol, noise, comfort, regular time of going to bed)
Problems in maintain sleep: PTSD, COPD, CCF, asthma, diabetes and pain.
Early morning awakening: Depression
Feeling tired: Sleep apnoea syndrome.

PLAN:
Management will depends on the cause. Examination and investigations to follow.
Give leaflets to explain sleep hygiene.

Amitriptyline

44 yr old Mrs Smith has been taking Amitriptyline for last 4 weeks. She has not noticed any improvement. Talk to Mrs Smith

Amitriptyline usually causes dry mouth, sedation, and tremor. Uncommon Sid effects include prolonged qt interval. They also can be fatal in overdoses.
If patient experiences side effect and is unable to tolerate the side effect, advice that there are other options that we can try. Some of the medications do not have these side effects and we can try those. (SSRI)
Why was I given this old medication? Well, I do not know, you have to speak to your own doctor to find out why he prescribed this medication. All medications have side effects. Some time these side effects can be use full, like sedation. Choice of antidepressant medication can be difficult and one has to consider many factors.
If patient not happy with the treatment she has received, inform her that she may have to consider complaining to find answers to her questions. She can also contact PALS.

Paroxitine / Fluoxetine

Mr Smith 32 years of age, has been taking Fluoxetine for last 2 weeks. He has not seen any benefit talk to the patient and address his concerns

Introduce and explore his concerns

General Advice:
Fluxoetine is an antidepressant medication and it works by increasing the levels of serotonin (a chemical in the brain associated with mood). It usually takes 4- 6 weeks to start showing affect. You should not stop this tablet suddenly as it may give you some withdrawal symptoms like feeling nervous and shakes.

Is it addictive? No it is not addictive. Some people may experience withdrawal symptoms when it is stopped suddenly. This can be dealt by gradually reducing the dose before stopping the medication
Will it make me worse? There are some reports that Paroxitine can make anxiety worse in the first week of treatment. But you are assured that your symptoms will then start to improve
Will it make me suicidal? There have been some reports about this. This is not yet been confirmed. If you notice any difference in your mood and if you feel suicidal please let me know and I can change the medication.
Will it make me a violent person? There have been some reports about this. This is not yet confirmed. If you notice any difference in your mood and if you feel angry or irritable please let me know and I can change the medication.
How long do I have to take this medication? Usually we advise to carry on taking the medication for at least one year after complete recovery. It will depend on your progress and I will be able to provide further information on this during your follow up appointment.
Will I get better? You should start noticing the improvement in next 3- 4 weeks. If you do not get better in 6 weeks time, we will consider changing your medication.
What are the Side effects: Common side effects are nausea, GI disturbance, rarely it can affect the heart, (QTc prolongation) and slight increase in chance of having fit.
Does it affect Libido? No it does not affect Libido, but can cause sexual dysfunction, erectile problems and retrograde ejaculation. Depression can also cause erectile dysfunction. All antidepressant have this side effect. We need to observe how you get affected by this medication. We may need to change it if that happens
How long I should take this medication:
You should take this medication for 6 months to 1 year from the date you completely recover. This is to reduce the chance of recurrence.

Mini mental state examination
MMSE / COGNITIVE ASSESSMENT

Instruction to the candidate:
72 yr old Mr Smith was brought to hospital by his brother. Mr Smith was found wondering and he now appears confused. Do a mini mental state examination/ Cognitive examination.

Introduction is very important:
You need to explain

Orientation to time (5 Mark)
- What is the year, season, date, day and month

Orientation to place (5 Mark)
- Where are we: town, county, country, which hospital, surgery or house, and which floor

Registration (3 Mark)
- Name 3 objects (apple, table, penny) taking 1 second to say each one.
- Then ask the individual to repeat the names of all 3 objects.
- Inform that he/she should remember these 3 names as you are going to ask him/r to recall again after sometime.
- Repeat the object names until all 3 are learned (up to 6 trials).

Attention (5 Mark)
- Spell the world "world"
- Now ask him/her to spell it backwards. DLROW

Recall (3 Mark)
- Ask for the 3 objects you have asked him/ her to remember, (apple, table, penny).

Language (1 Mark)
- Ask the person to repeat the following: "No ifs, ands or buts". Allow only one trial

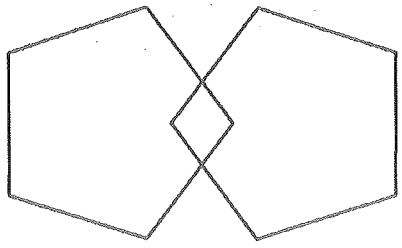
Naming: (2 Mark)
- Point to a pencil and ask the person to name this object
- Do the same thing with a wrist-watch

Reading (1 Mark)
- Write "CLOSE YOUR EYES" in large letters and show it to the patient. Ask him or her to read the message and do what it says

Writing (1 Mark)
- Ask the individual to write a sentence of their choice on a blank piece of paper. The sentence must contain a subject and a verb, and must make sense. Spelling, punctuation and grammar are not important

Drawing (1 Mark)
- Show the person a drawing of 2 pentagons which intersect to form a quadrangle. Each side should be about 1.5 cm. Ask them to copy the design exactly as it is. All 10 angles need to be present and the two shapes must intersect to. Tremor and rotation are ignored.

3 Stage Command (3 Mark)
- Give the person a piece of blank white paper and ask them to follow a 3-stage command: "Take a paper in your right hand, fold it in half and put it on the floor"



Close your eyes

Mental State Examination:
Mental State examination is nothing but taking history, if question says do mental state examination, proceed as history taking.
Make sure you cover following areas in your history
HOPC
MOOD
DELUSIONS
HALLUCINATIONS
INSIGHT
MEMORY PROBLEMS

Usually in the exam, they ask you to do mental state examination of psychotic patient. You just have to take history as usual.

Capacity Assessment:

84 yr old Mrs Smith had a fall and sustained fracture neck of the femur. Your consultant has decided to do a hip replacement surgery but Mrs Smith refuses to give consent. Access her capacity.

Introduction: Mrs Smith I am Dr>..... one of the junior doctors here. I have come to do an important assessment today. I will be carrying out assessment of your capacity to refuse hip replacement operation. Is this best time for me to do this assessment?
To carry out this assessment, I will first explain the procedure, why it is done, what are the potential risks with the procedure and what are the consequences of not having this operation. At the end I will ask you few questions to make sure that you have understood the information given. Do you have any questions?

First explain the procedure, risks, benefits and consequences
Ask questions to make sure Mrs Smith has understood the procedure
Ask why she does not want this procedure to be carried out?

Mock Test

Depression

Instruction to the candidate:
1. Mr Thompson is 37 yr old. He has been feeling low in mood for last 3 months. His GP has recently prescribed him Fluoxetine 20mg. He has not noticed any significant improvement in his mood. His GP has now referred him to the psychiatric clinic for advice on further management. Take history form Mr Thompson and discuss about the further management with him.

Instruction to the actor: Scenario 1.
General Instructions:

Mr Thompson is 37 yr old
Onset: 3 months ago, following the death of his father. He was the carer of his father and he feels guilty that he died. His father was suffering from dementia.

Progress: He has been gradually getting worse. Started to take Fluoxetine 2 months back but has notice any improvement.

Nature/ Pattern: He feels depressed every day and is worse in the morning.

Effect of illness on life: He is now unable to enjoy sports. He doesn't like to meet friends and stay at home most of the time. He feels tired and lack of energy

Biological Features of depression: Gets up early in the morning and unable to sleep after that. He has lost interest in food but has not lost weight

Psychological Symptoms:
He feels worthless and feels hopeless about future

Suicidal Ideas: He does not feel suicidal

Associated Symptoms: He feels anxious at times, mainly in the morning. No panic attack or phobia.
He does not clean or check repeatedly
He do not hear voices
He does not have strange thoughts
He does not drink excessively

Past History:
No previous history of depression
No Previous admission to psychiatric Hospital
No Previous suicidal attempts

Past Medical History:
No history of endocrine problems including thyroid. No problems of epilepsy. Do not suffer from diabetes or hypertension.

Social History:
He lives on his own. He is unemployed

Family History:
No history of mental illness in the family

Instruction to the Examiner:
In this OSCE station, you should assess the candidate's skills of interviewing a patient and eliciting clinical features of the presenting complaint, its associated symptoms and the ability to formulate the provisional diagnosis and management plan

MARK SHEET IS ONLY AN EXEMPLERY TO ASSISST CANDIDATES TO PRACTICE.
Red flag and pit falls: Suicide Risk assessment

What else you need to know about depression:
Look for signs of depression: poor eye contact, monotonous speech, slow speech and psychomotor retardation.
Look for signs of anxiety: Restlessness, rubbing hands against each other, sweating and fear

Differential Diagnosis: You can make more than one diagnosis.
1. Depression
2. Generalised anxiety disorder
3. Panic Attack
4. Psychosis
5. Alcohol problem
6. Obsessive compulsive disorder
7. Grief Reaction
8. Organic pathology

Introduction • Greeting • Explains the purpose of visit	1	2	3
Interview Skills • Open questions • Shows empathy and establishes rapport			
Elicits the symptoms and signs of the presenting complaint • Onset, duration, progression and nature • Biological symptoms- sleep, appetite and energy • Cognitive symptoms- worthless and hopeless feelings • Impact on life • Associated Symptoms • Anxiety, panic attack, phobia, alcohol and psychotic symptoms • Risk of suicide			
Past medical and psychiatric history			
Social History			
Family History			
Elicits beliefs and concerns			
Differential diagnosis			
Management Plan • Physical examination • Corroborative history • Speaking to seniors • Possible change of antidepressant medication • Bereavement counselling			
Overall performance			

Depression, suicidal ideas and PTSD

Mr Smith is 38 year old met with an road traffic accident 2 weeks ago. He has come to A & E complaining of neck pain. He has been seen by A & E doctor and diagnosed to have whiplash injury. He has now been referred for a psychiatry assessment. You are the SHO in psychiatry. Take history and discuss the management.

In this scenario, patient has symptoms of PTSD and Suicidal ideas.

PTSD symptoms should be explored as explained in PTSD
Exploring suicidal ideas:
Duration: How long have you been getting suicidal thoughts?
Frequency: How often you get these thoughts
Severity: How strong are these feelings? Have you thought about suicide seriously?
Content: Have you made nay plans? If yes, can you tell me about the plan?
Do you fee your life is not worth living? Why do you feel that way?
Protective factors: How did you manage to stop acting on these thoughts?

Anxiety Disorder

Instruction to the candidate:
Mrs Scott is 27 yr old. She has come to A & E department complaining of tightness in the chest and palpitations. Medical registrar has seen her and after analysing her investigations and clinical findings has ruled out any physical pathology. She has now been referred to psychiatrist. You are SHO in psychiatry. Take history and inform Mrs Scott about the plan of management.

Instruction to the actor:
General Instructions:

Mr Scott is 27 yr old female
HOPC: 6 hrs ago while she was sopping in the superstore. Started suddenly and lasted for few minutes. Gradually improved and now she is feeling better. She has been feeling nervous over last 6 weeks and had a similar episode of sweating and breathlessness 1 week ago at home. The previous episode was of milder degree.
3 months ago her close friend died in a car accident. She did not witness and has come to terms with her loss.

Autonomic symptoms of anxiety: Sweating, palpitations and tremor

Symptoms pertaining to chest and abdomen: Churning of the stomach, tightness in the chest, chest pain

Psychological Symptoms: Feelings of impending doom and fear

NOTE: Any two positive symptoms listed in this box are enough to make a diagnosis of anxiety disorder. Do not ask for all these symptoms

Nature/ Pattern: Has been feeling nervous over last 6 weeks especially in the morning. Can not think of any precipitating factors. On two occasion experienced panic attack, once while at home and the other time when she was in the superstore (Presenting complaint)
Effect of illness on life: Continuing to work from home as a financial advisor.
Suicidal Ideas: She does not feel suicidal
Associated Symptoms:
She has been feeling low for last 4 weeks. Sleep is disturbed, finds it difficult to fall asleep. Appetite is normal.
He does not clean or check repeatedly
He do not hear voices
He does not have strange thoughts
He does not drink excessively
Past History:
No previous history of depression
No Previous admission to psychiatric Hospital
No Previous suicidal attempts
Past Medical History:
No history of endocrine problems including thyroid. No problems of epilepsy. Do not suffer from diabetes or hypertension.
Social History:
She lives on her own
Family History:
No history of mental illness in the family

Instruction to the Examiner:
In this OSCE station, you should assess the candidate's skills of interviewing a patient and eliciting clinical features of the presenting complaint, its associated symptoms and the ability to formulate the provisional diagnosis and management plan
MARK SHEET IS ONLY AN EXEMPLERY TO ASSISST CANDIDATES TO PRACTICE THIS TOPIC WITH THEIR OWN COLLEGUES.
You can award A B C D E grades for each topic on the right hand side column
What else you need to know about Anxiety disorders:
Look for signs of Anxiety: Agitation, rubbing hands against each other, uncomfortable, difficult to breath and sweating
Red flag and pit falls: Suicide Risk assessment, ask about depression and ability to differentiate between different anxiety disorders

Introduction • Greeting • Explains the purpose of visit	1	2	3
Interview Skills • Open questions • Shows empathy and establishes rapport			
Elicits the symptoms and signs of the presenting complaint • Onset, duration, progression and nature • Biological symptoms- • Cognitive symptoms- • Impact on life • Associated Symptoms • Risk of suicide			
Past medical and psychiatric history			
Social History			
Family History			
Elicits beliefs and concerns			
Differential diagnosis			
Management Plan • Physical examination • Corroborative history • Investigations • Speaking to seniors • Anxiety management, relaxation therapy • Bereavement counselling • Antidepressant medication			

Differential Diagnosis: You can make more than one diagnosis.

1. Generalised anxiety disorder: Feels anxious most part of the day
2. Panic disorder: Episodic with no clear pattern of precipitating factors. No avoidance
3. Phobia: Episodic with Clear precipitating factors and avoidance
4. Depression: Can be co morbid
5. Psychosis
6. Alcohol problem
7. Obsessive compulsive disorder
8. Grief Reaction
9. Organic pathology

Obsessive compulsive disorder (OCD)

Instruction to the candidate:
Mrs Scott is 31 yr old. She has been referred by her GP because she has been washing her hands excessively. You are the SHO in psychiatry. Take history and discuss the management with the examiner
Instruction to the actor:
General Instructions:

Mr Scott is 31 yr old female
HOPC: Has been washing hands excessively since her teenage years. Her symptoms have gone worse for last 3 months. At around same time she moved her house. The symptoms are getting worse and she is finding it difficult to cope.

Core symptoms of OCD
- Excessive and repeated washing or/and cleaning.
- Ruminations: Worrying excessively about the mankind.
- Thoughts: Repetitive thoughts

These experiences should not be pleasurable
Must have insight: Should consider these behaviour as unnecessary
Causes distress for engaging in such repetitive behaviour.

Nature/ Pattern:
After moving to the new house, symptoms have gone worse for no particular reason. She does feel that the house move was stressful. She washes her hand after touching any one or any object up to 40 times a day.
Can be more severe on some days compared to other.
Insight: Does feel that it is unnecessary to do
Effect of illness on life: Has not managed to go to work. Finding it difficult to cope at home
Suicidal Ideas: She does not feel suicidal
Associated Symptoms:
She has been feeling low for last 3 months. Sleep is disturbed, finds it difficult to fall asleep.
Appetite is normal.
He does not clean or check repeatedly
He do not hear voices
He does not have strange thoughts
He does not drink excessively
Past History:
No previous history of depression
No Previous admission to psychiatric Hospital
No Previous suicidal attempts
Past Medical History:
No history of endocrine problems including thyroid. No problems of epilepsy. Do not suffer from diabetes or hypertension.
Social History:
She lives with her 2 children aged 4 and 6
Family History:
No history of mental illness in the family
Effect on physical health: Dermatitis

Instruction to the Examiner:
In this OSCE station, you should assess the candidate's skills of interviewing a patient and eliciting clinical features of the presenting complaint, its associated symptoms and the ability to formulate the provisional diagnosis and management plan

MARK SHEET IS ONLY AN EXEMPLERY TO ASSISST CANDIDATES TO PRACTICE THIS TOPIC WITH THEIR OWN COLLEGUES
You can award A B C D E grades for each topic on the right hand side column

Red flag and pit falls: Suicide Risk assessment, Insight and effect on life

Introduction • Greeting • Explains the purpose of visit	1	2	3
Interview Skills • Open questions • Shows empathy and establishes rapport			
Elicits the symptoms and signs of the presenting complaint • Onset, duration, progression and nature • Symptoms of OCD • Insight • Impact on life • Associated Symptoms • Risk of suicide			
Past medical and psychiatric history			
Social History			
Family History			
Elicits beliefs and concerns			
Differential diagnosis			
Management Plan • Physical examination • Corroborative history • Investigations • Speaking to seniors • CBT • Antidepressant medication			
Overall performance			

Differential Diagnosis: You can make more than one diagnosis.
10. OCD
11. Psychosis
12. Depression: Can be co morbid
13. Generalised anxiety disorder: Feels anxious most part of the day
14. Organic pathology

Psychosis

Instruction to the candidate:
Police has brought 32 yr old Mr Ratcliff to A& E. He was running in the road and has threatened the police officers. He feels that he is under surveillance. You are the psychiatric SHO on call. Take a History

Instruction to the actor:
General Instructions:
Mr Scott is 32 yr old Male. You are not happy to be in the A & E. You do not think there is a need to speak to the doctor.
HOPC: Mr Ratcliff feels that police officers have involved in the conspiracy of terrorists to kill him. He has been staying in his house most of the time and when he goes out he feel that he is been watched. He started to feel like this 7 weeks ago when he saw an unmarked police vehicle crossed his house twice on same day.
He is convinced that he will be killed

Symptoms:
- 3rd person Auditory hallucinations
- Delusions
- Thought broadcasting, withdrawal and insertion
- Made feelings affect and volition
- Blunted affect

Nature/ Pattern: Constantly has fear. Hear voices when no one around.

Effect of illness on life: Stay in his room. Do not interact with his family or friends
Suicidal Ideas: She does not feel suicidal
Risk to others: No intentions or plan

Associated Symptoms:
She has been feeling low for last 4 weeks. Sleep is disturbed, finds it difficult to fall asleep.
Appetite is normal.
No drug use
No alcohol use

Past History:
No previous history of depression
No Previous admission to psychiatric Hospital
No Previous suicidal attempts

Past Medical History:
No history of endocrine problems including thyroid. No problems of epilepsy. Do not suffer from diabetes or hypertension.

Social History:
She lives on her own

Family History:
No history of mental illness in the family

Instruction to the Examiner:
In this OSCE station, you should assess the candidate's skills of interviewing a patient and eliciting clinical features of the presenting complaint, its associated symptoms and the ability to formulate the provisional diagnosis and management plan
MARK SHEET IS ONLY AN EXEMPLERY TO ASSISST CANDIDATES TO PRACTICE THIS TOPIC WITH THEIR OWN COLLEGUES.
You can award A B C D E grades for each topic on the right hand side column

What else you need to know about Anxiety disorders:
Look for signs of Psychosis: Patient may look perplexed, may find it difficult to follow the chain of thoughts. May be suspicious and difficulties in establishing rapport.

Red flag and pit falls: Good introduction and ability to control the interview. Elicits the symptoms

	1	2	3
Introduction • Greeting • Explains the purpose of visit			
Interview Skills • Open questions • Shows empathy and establishes rapport			
Elicits the symptoms and signs of the presenting complaint • Onset, duration, progression and nature • symptoms- • Impact on life • Associated Symptoms • Risk of suicide • Risk to others • Drugs and alcohol			
Past medical and psychiatric history			
Social History			
Family History			
Elicits beliefs and concerns			
Differential diagnosis			
Management Plan • Physical examination • Corroborative history • Investigations • Speaking to seniors • **Admission** • Antipsychotic medication			
Overall performance			

Differential Diagnosis: You can make more than one diagnosis.
Schizophrenia
Mania
Hypomania
Drugs

How to explore a delusion:

Delusion is a false belief. Patients typically lack insight to delusion. They usually present to hospital due to some behavioural problems (Threatening, suspicious, aggressive or withdrawn)

Step 1: Explore the reason for their abnormal behaviour.
Can you please tell me why where you threatening _____

The reason for his abnormal behaviour could be a abnormal thought.

Step 2: Check if he believes the thought.
Do you believe that Mr Smith was trying to harm you?

Step 3: Find out rationale for believing such a thought.
If his reasons are impossible to be true then that would suggest a delusion.

Explore passivity phenomena:
Do you feel that some is controlling your thoughts actions or feelings?
Do you some time feel that your thoughts are getting broadcasted?
Do you feel that some of your thoughts are not your own?
Do you some time feel that your thoughts have been taken away?

If any of the above is positive, explore it further.

Exploring auditory hallucinations:

Elicit duration, frequency, pattern, how many voices, whose voice and content.
Does the voices talk to you or do they talk between themselves

PLAB Right Limited

OBG

URINARY INCONTINENCE

Can you tell me more about the problem?
How long have you had this problem for?
Rule out – Stress incontinence
Do you pass water when you cough or sneeze?
Rule out – Urge incontinence
Do you pass water before reaching the toilet?
Rule out – True incontinence
Do you pass water all of the time?
Rule out UTI - Urinary tract infection
Do you have a fever?
Do you have any pain while passing water?

STRESS INCONTINENCE

How many children do you have?
Have you had any delivery by forceps or ventouse?
When was your last period?
I am going to examine you. We will do a urine tests. We will do a special test called Urodynamic flow studies to know more about urine outflow.
If this turns out to be stress incontinence, then we will refer you to a physiotherapist for pelvic floor exercise.
If this does not help surgery is the next option.

URGE INCONTINENCE

This occurs due to over activity of the bladder. Treatment for this is training the bladder, which we will teach you, medicine which will calm the bladder will be given to you. Very rarely surgery may be considered.

TRUE INCONTINENCE

There is a fistula formation between front passage and water pipe. Surgery is the only option.

HYPEREMESIS GRAVIDUM

Urine ketones positive, 8 weeks pregnant and history of vomiting. Take a brief focused history and discuss the MX
Can you tell me more about the problem?
How long have you been like this for?
How many times did you vomit?
How much did you vomit?
Is there any particular time during the day when it is worse?
Have you had this problem in the past?

Rule out – Multiple pregnancy

Is there any history of multiple pregnancies in your family?
Rule out – Thyroid problem
Have you noticed any lumps in your neck?
Rule out – UTI
Do you have a fever?

Diarrhoea – How is your bowel?
Well, I think as per your history that you have got a condition called hyperemesis gravidum.
Do you know anything about it?
It is not an uncommon condition during the initial few weeks of pregnancy. The exact cause is not known. Most probably it is caused by an increased level of a chemical substance called hormone. This hormone is BHCG
We are going to admit you to hospital. We will do some blood tests and will do a scan of the tummy. Because of vomiting, you have lost a lot of fluid. We will give you fluid as well as antiemetic, to stop vomiting. When everything appears fine, we will discharge you. Before discharging you, we will introduce our dietician. She will tell you about what type of diet you should take to minimise this problem.

PRIMARY AMENORRHEA

Have you had any period, any time in your life?
Rule out – Pregnancy
Is there any chance that you could be pregnant?
Rule out Imperforate hymen
Have you noticed any swelling in the pelvis which comes and goes?
Do you have any cyclical pain in the pelvis?
Rule out – Turner's syndrome
When did you notice the growth of your breast?
Are your breasts fully developed?
Are hairs in the axilla and on the pubis sparse?
Rule out Stress
Emotional – Do you have any stress at home?
Physical – Do you exercise a lot?
Rule out depression
How is your mood?
Are you taking any medicine?
Do you have any medical illness?
Is there any disease which runs in your family?
Is there anyone in the family who is having a similar problem?
Social history – Whom do you live with?

SECONDARY AMENORRHEA

Can you tell me more about the problem?
How long have you been having this problem?
When was your first period?
Can you tell me more about the period?
Were they regular or irregular?
Was it painful or painless?
When was your last period?
What was the duration of your period?
Rule out – Pregnancy
Have you noticed any distension in your tummy?
Do you have early morning vomiting?
Have you noticed any change in your breasts?
Rule out – PDS (Polycystic ovarian syndrome)
Have you gained weight recently? Have you noticed any differing of voice?
Have you noticed any unusual facial hair growth?
Rule out – Pituitary problem
Have you noticed any discharge from the breast?
Do you have any vision problem?
Rule out – Diabetes

Do you pass lots of water?
Rule out – Cancer
How is your appetite?
Have you lost any weight recently?
Have you noticed any lumps or bumps in the body?
Rule out – Stress
Emotional – Do you have any family problems?
Physical – Do you exercise a lot?
Rule out – Depression
How is your mood?
What contraception have you used in the past?
How many children do you have?
Do you have any medical illness?
Do you take any medicine?
Is there any disease which runs in the family?
Is there anyone in the family who is having a similar problem?
What is your occupation?
Who do you live with?
Do you smoke? So you drink alcohol? Do you take any drugs?
Are you able to manage your daily routine activity?

ABDOMINAL PAIN

Pain in RIF (right iliac fossa) LIF (left iliac fossa) Pelvis
Can you tell me more about the problem?
How long have you had this problem for?
Did it happen suddenly?
Where is the pain?
Is it a sharp pain?
Is it a continuous pain?
Does the pain go anywhere?
Is there anything which makes it worse?
Is there anything which makes it better?
Have you had this problem in the past?
Rule out – Ectopic
When was your last period?
Do you have shoulder tip pain?
Did you bleed down below?
Rule out – Appendicitis
Did the pain first start in the centre, then move to the pelvis?
Did you vomit?
Rule out – Ureteric colic
Do you have a fever?
Do you have any pain when passing water?
Rule out – PID (Pelvic inflammatory disease)
Have you noticed any discharge down below?
Can you tell me more about your period?
When was your first period?
Are your periods painful?
Are your periods regular?
What type of contraception have you used in the past?
Do you have any medical illness?
Do you take any medicine?
Is there any disease which runs in the family?

Is there anyone in the family who is having a similar problem?
Who lives at home?
What is your occupation?
Do you smoke?
Do you drink alcohol?
Are you able to manage your daily routine actively?
Do you want to tell me anything else?
Assessment – HRT and OCP are the same because both contains oestrogen and progesterone, but in different amounts.

HYSERECTOMY

I am here to talk to you about a hysterectomy.
What do you know about a hysterectomy?
Hysterectomy is a major operation and is done under general anaesthesia. In this operation we will remove the uterus. We will put a cut in the bikini line. It will be from side to side and the length of the incision will be 4-6 inches. The duration of this operation is about 1-2 hours. You will wake up in the recovery room.
Possible complications

1. Risk of anaesthesia
2. Pain
3. Infection
4. Injury to surrounding structure ie. Bladder, bowel or ureters
5. Bleeding

When can I go back to work? Well, this is a major operation. Your body will take some time to recover. I think it is better to take rest for at least a month or two. Then you can judge for yourself whether it's fine to work or not, there after.
Do you have any questions? I will provide you with some leaflets. Thank you.

INFERTILITY

I am here to talk to you about difficulty in conceiving? Is that alright with you?
Normally, whatever we are going to talk about will be confidential.
Some questions can be sensitive, please do not mind.
How many times do you have intercourse in week?
Have you had any pregnancy in the past from the present or previous relatioships?
Do you smoke?
Do you drink alcohol?
Do you have any medical illness?
Do you take any medicine?
What contraception have you used in the past and when did you stop using it?
Have you had any infections down below?
Did anyone tell you that you have endometriosis or polycystic ovaries?
Have you had any surgery in your pelvis?
Well, I am going to ask a few questions pertaining to your husband/partner?
Were there any pregnancies in the past from the present or previous relationships?
Is he having any problem in maintaining or sustaining an erection?
Has he had any infection down below?
Has he had any surgery to his private parts in the past?
Does he have any medical illness?
Does he take any medicine?
Does he smoke? Does he take alcohol? Does he take drugs?
We are going to examine you and we will do some tests. We will do a few blood test to find out whether you are ovulating. We will see whether tubes are patent or not by a procedure called hysterosalpingography or laparoscopy and dye test.

Infertility is a common problem. Many reasons are these which can cause infertility. In women, the most common cause of infertility is is anovulation or fallopian tube problem.
We will examine your husband as well. We will do a semen examination.
In 1/3 of the couples there is a problem in the female, in 1/3 there is a problem in the male and in 1/3 there is a problem with both.
Many times we can not identify the problem and call it unexplained infertility.

1. Eat a healthy balanced diet
2. Do regular exercise
3. Stop smoking
4. Drink alcohol in moderation
5. Medicines are available to improve the fertility

If all methods fail, then we can opt for a test tube baby.

DOWN SYNDROME

I am here to talk you about tests which can detect Down syndrome.
What do you know about it?
There are two types of tests. One is a screening test, which will tell you the risk of having a Down's syndrome baby. This is not a definite test, this is a blood test or a scan.
If the blood test tells that the risk is low, it does not mean that you do not have a baby with Down syndrome. If the test shows high risk, it does not always mean that you have a Down's syndrome baby. We have to confirm it by another test. These tests are invasive tests and they provide definite diagnosis. Amniocenteses are done around 16-18 weeks of pregnancy. Fluid is taken around the foetus through USG guided needle. Cells are sent to the lab for Karyotyping studies. Results come within 2-3 weeks.
The risk of miscarriage is about 0.5-1%.
In chorionic villus sampling – tissue biopsy is taken from the placenta and sent to the lab for karyotyping studies. Results come in 2-3 days. This procedure is done after 10 weeks and before 14 weeks of pregnancy. Risk of miscarriage is about 1-2%.
Which is the best test?
All tests are good. All tests have negative points, so please take your time to make your decision. We will help you make an informed decision.

PRE ECLAMPSIA

What is pre eclampsia?
It is one of the complications of pregnancy. It happens in pregnancy only.
What happens in pre eclampsia?
In this, blood pressure increases, protein leaks out from the kidney into the water. Even swelling of the face, legs or hands can be there.
What is the cause of pre eclampsia?
Exact cause is not known. But it is most probably due to a problem within the placenta. In this, the blood vessels of the placenta do not develop well.
Why me?
Any pregnant lady can have pre eclampsia. But certain risk factors are there which increases the chances of having pre eclampsia.
Like -:
Those who have had pre-eclampsia in a previous pregnancy.
If you have family history of pre eclampsia.
If you are pregnant for the first time or it is the 1st pregnancy with a new partner.
If you are at the extremes of reproductive age.
Even certain conditions like diabetes, kidney disease and chronic hypertension can increase your risk of developing pre-eclampsia.

What is eclampsia?

Eclampsia becomes a fit. It is the most serious life threatening complication of pre eclampsia. It is not necessary that all women with pre eclampsia will have eclampsia. Rarely one or two will have this problem.
Pre eclampsia and eclampsia both can affect the child and mother. Pre eclampsia can affect other parts of the body also.
My booking blood pressure was normal.
Yes, in pre eclampsia booking blood pressure will be normal. In pre eclampsia blood pressure increase after 24 weeks gestation, usually after 28 weeks.
What are the clinical features of pre eclampsia?
Most often, if blood pressure is increased then chances of complications will also increase.
In mild cases, you may not have any complications. Symptoms of severe pre-eclampsia include - headaches, blurring of vision, tummy pain, vomiting etc. If you have any of these, please come to us immediately.
What can happen to me?
Some of the problems which can occur in worst pre eclampsia cases are-:

1. Fits
2. Liver, kidney and lung problems
3. Clotting problem
4. Stroke
5. Bleeding problem
6. Risk of still birth also increases.

Can pre eclampsia recur in the next pregnancy?
If you have had pre-eclampsia in the 1st pregnancy, your risk of developing pre-ecclampsia in the next pregnancy is about 6%.
Is there any medicine which can prevent pre eclampsia in the next pregnancy? Unfortunately, no.
Are you going to give me any medicine? We will give you some medicine to control yoyr blood pressure but the best cure is the delivery of the baby.
Sometimes when pre eclampsia is severe and labour cannot be induced quickly we may have to perform a caesarean section.
In mild cases, we try to delay the delivery until full term.
Magnesium sulphate can be given to reduce the risk of eclampsia significantly. This does not harm the baby. It is given through the blood vessels for a day or two. It is given usually around the time of delivery.
Can fits occur after the delivery?
Yes, chances are there. It can occur within a week to 10 days. For this reason we will monitor you carefully, even after the delivery.
We will give you some stockings to prevent getting clots in the legs and chest and an injection to thin the blood after delivery.

MISCARRIAGE

A 12 week pregnant lady has bleeding down below and pain in the abdomen. It is a case of miscarriage. Inform her about the diagnosis and do the counselling.
Do you want somebody to be with you? I am afraid I do not have good news. I am sorry to inform you that you have had a miscarriage. You have lost your pregnancy.
It is natural that you will upset. It can happen to anyone. Please do not blame yourself.
What is the cause for this miscarriage?
It is difficult to tell the exact cause, but the most common cause of early miscarriage is chromosomal abnormality in the baby. 20-15% of all pregnancies end in a miscarriage. Infection, weakness of cervix etc can cause late miscarriages.
Can it happen again?
Usually it does not happen, but we never know. So we cannot say no firmly.
Can I have a normal pregnancy after this?
Yes, very likely.
Is it due to stress or work?
No, this is a misconception among general public.

What are clinical features of miscarriage?
Usually women will have tummy pain and bleeding from the front passage. The blood may contain clots or tissue. This bleeding can be mild or can be like a very heavy period.
The bleeding may last a few days to a week.
In some cases, the baby dies and is retained inside the uterus. There will be no pain and bleeding and this will be diagnosed by a scan. This type of miscarriage is called a missed miscarriage.
Are you going to do some test to know the cause of miscarriage?
As miscarriages are very common, usually we do not do any tests for miscarriage when it has happened for the first time.
We do a test when there are 3 consecutive miscarriages.
What are you going to do now?
One option is that there is wait and watch. In about 70% women, pregnancy tissue will come out along with bleeding within a few days. This option is called conservative management.
Ather option is medical management. We will give you one medicine orally, and we will ask you to come back to hospital after 48 hours. We will give you some medicine orally or put some pessaries on the front passage. Products of pregnancy will come out with bleeding. You may have period like pain but we can give you some painkillers.
Another option is surgery. This is a minor procedure. This is done under general anaesthesia. In this operation we will take out the product of pregnancy. There is a risk of anaesthesia, bleeding, infection, damage to cervix and perforation of the uterus with this procedure.
Please take some time to decide after reading the leaflet I am giving you.
Do you have any questions?
Miscarriage in second trimester – Usually medicine is given to bring out products of conception.

TERMINATION OF PREGNANCY

Are you sure that you want a termination of pregancy?
Is this your final decision?
Does your partner know about it?

Termination of pregnancy in the first trimester is usually done by medical or surgical method.
In Medical Termination of Pregnancy (MTOP), we will give oral tablets and 48 hrs. later we give you further tablet which can be given orally, in your front passage or in your back passage. With the bleeding products of pregnancy will come out. Rarely bleeding can be severe. Mostly, it will be like a painful heavy period. Sometimes, you may not expel all products of the pregnancy. In that case, we may have to have a minor surgical procedure.
In surgical procedure, we will put you to sleep and we will suck out the pregnancy products. Our doctors are well trained and experienced, so chances of complications are rare.
But I am duty bound to tell you about the complications, which are infection, bleeding, damamge to cervix and peroration of uterus with possible damage to surrounding organs such as pladder, bowel, ureter or blood vessels.
After taking rest for a couple of days you can go to work.
Termination of pregnancy in second trimester is done by medicine only. In this, we will give medicine orally and we will put some pessaries on the front passage. This will be done under general anaesthesia in theatre and we will take out the products of pregnancy.
Do you have any questions?
When can I start my new contraception?
Immediately after the procedure.

TUBAL STERILIZATION

Mrs Rathe is 36 years old, having 3 children wants Tubectomy. Tell her that this a permanent irreversible procedure for all practical purpose.
I would like to ask a few questions. Is that ok with you?
How many children do you have?
Are you in a stable relationship with a single partner?

Find out about if she knows about other forms of contraception including Vasectomy
Procedure:
This procedure is done by key hole surgery. It is performed under general anaesthesia. By general anaesthesia we will put you to sleep.
This is minor surgery. This surgery is done as day case surgery. That means we will discharge you on the same day if everything is fine.
In this operation we will make one cut at the belly button and two on the sides of the pelvis. Through one hole we will insert a camera to visualise the inside of the tummy. We will inflate the tummy with a gas for better visualisation of the tummy. This gas is a normal gas and it will be absorbed by the tummy. Through the other holes we will pass instruments, we will identify the tubes and we will ligate the tubes with clips.
Sometimes due to unforeseen reasons we may have to convert this key hole surgery into open operation, but this happens rarely. In a nut shell, there is a possibility of converting key hole surgery into open surgery.

What are the complications?
As you know all surgeries have complications even if it is a minor surgery. But staff and doctors are well trained and experienced so chances are extremely less. However, I am duty bound to tell you that there are complications.
1. Bleeding
2. Infection
3. Injury to surrounding structure like bladder and bowel.

Unfortunately, this operation can be a failure in which you can get pregnant after this surgery. Though this happens very rarely.
Can it be reversed if I wish to have child?
This procedure is not reversible for all practical purpose. Reversal of sterilisation is not available on NHS. It is a permanent contraception.

APIT
Mrs Aigburth is 38 years old and she is 36 weeks pregnant. She has noticed some discharge down below since 3 hrs. Take a brief focused history and tell the management.
Good morning Mrs Aigburth. I am Dr _____; I am here to talk you about your discharge down below. Is that alright? Can you tell me more about this?

HOPC> Duration, Onset and Progress
Nature> Colour, quatity, Blood stain, Stress incontinence,
Associated Symptoms> Pain, Fever, Contractions
Obstetric History
Medical History
Social History

APIT

Mrs Atkin is 36 years old. She is 32 weeks pregnant and has noticed bleeding from down below. Take a brief history and tell the management.
Hello Mrs Atkin, good morning. I am Dr, one of the junior doctors in this hospital. I am here to talk to you about the bleeding down below. Is that alright? Can you tell me more about the problem?
HOPC> Duration, Onset and Progress
Nature> Colour, quatity, smell
Associated Symptoms> Pain, Fever, Contractions, trauma
Past history
Obstetric History
Medical History
Social History

Management we are going to admit you. Then we will examine you.

Mean while we will run some blood tests. We will do the scan of the tummy to make sure whether everything is fine. We will monitor the baby's heart. If bleeding stops for 48 hours, we may discharge you. But we will keep you on at risk category in which we will monitor you more closely.

On the other hand, if conditions deteriorate then we may have to deliver the baby by caesarean section. Before delivering the baby we may give you steroid injection to help the breathing of the baby if time permits.

CHECK THE SUITABILITY OF A PATIENT FOR OCP

Mrs Leena is 28 years old; she wants OCP for contraception assets. Assess her suitability for OCP.
Hello Mrs Leena, good morning. I am Dr Kumar, one of the junior doctors in this hospital. I am here to assess your suitability for OCP. Is that alright with you?
What do you know about OCP?
It is very commonly used form of contraception. But before giving it to you I would like to assess you whether OCP is suitable for you or not.
Do you smoke?
Do you have any heart problem?
Do you have any lung problem?
Do you have liver problem?
Have you been diagnosed with migraine?
Do you have any clotting disease?
Have you had hemorrhagic stroke in the past?
Are you suffering from a medical condition called porphyria?
Have you been diagnosed with high cholesterol in the past?
Do you have high blood pressure?
Is there anyone in your family who has clotting disorders or has had breast cancer?
What are the side effects of OCPs?
Headache, nausea, and breast tenderness.
Does it cause weight gain?
No
How does it work?
It temporarily stops the production of eggs.

Different types of contraception

Combined pill

This is often just called the 'pill'. It is more than 99% effective *if used properly*. Contains oestrogen and progestogen and works mainly by stopping ovulation. It is very popular. Different brands suit different people.

- *Some advantages* - Very effective. Side-effects uncommon. Helps ease painful and heavy periods. Reduces the chance of some cancers.
- *Some disadvantages* - Small risk of serious problems (eg thrombosis). Some women get side-effects. Have to remember to take it. Can't be used by women with certain medical conditions.

Progestogen only pill (POP)

Used to be called the 'mini-pill'. Contains just a progestogen hormone. More than 99% effective *if used properly*. Is commonly taken if the combined pill is not suitable. For example: breastfeeding women, smokers over the age of 35 and some women with migraine. Works mainly by causing a plug of mucus in the cervix that blocks sperm and also by thinning the lining of the uterus. May also stop ovulation.

- *advantages* - Less risk of serious problems than the combined pill.
- *disadvantages* - Periods often become irregular. Some women have side-effects. Not quite as reliable as the combined pill.

Contraceptive patch

A combined hormone form of contraception, containing oestrogen and progestogen hormones. It is essentially the same type of contraception as the combined oral contraceptive pill but it is used in a patch form. The contraceptive patch is stuck onto the skin so that the two hormones are continuously delivered to the body. There is one combined contraceptive patch available in the UK called Evra®.

- *advantages* - It is very effective and easy to use. You do not have to remember to take a pill every day. Your periods are often lighter, less painful and more regular. If you have vomiting or diarrhoea, the contraceptive patch is still effective.
- *disadvantages* - Some women have skin irritation. Despite its discreet design, some women still feel that the contraceptive patch can be seen.

Barrier methods

These include male condoms, the female condom, diaphragms and caps. Prevents sperm entering the uterus. Male condoms are about 90% effective if used properly. Other barrier methods are slightly less effective than this.

- *advantages* - No serious medical risks or side-effects. Condoms help protect from sexually transmitted infections. Condoms are widely available.
- *disadvantages* - Not quite as reliable as other methods. Needs to be used properly every time you have sex. Male condoms occasionally split or come off.

Contraceptive injections (eg Depo-provera® and Noristerat®)

Contain a progestogen hormone which slowly releases into the body. More than 99% effective. Works by preventing implantation and alos thickens the cervical plug. An injection is needed every 8-12 weeks.

- *advantages* - Very effective. Do not have to remember to take pills.
- *disadvantages* - Periods may become irregular (but often lighter or stop all together). Some women have side-effects. Normal fertility after stopping may be delayed by several months. Cannot undo the injection, so if side-effects occur they may persist for longer than 8-12 weeks.

Contraceptive implants (eg Implanon®)

An implant is a small device placed under the skin. Contains a progestogen hormone which slowly releases into the body. Is more than 99% effective. Works in a similar way to the contraceptive injection. Involves a small minor operation using local anaesthetic. Each one lasts three years.

- *advantages* - Very effective. Do not have to remember to take pills.
- *disadvantages* - Periods may become irregular (but often lighter or stop all together). Some women develop side-effects but these tend to settle after the first few months.

Intrauterine device (IUD)

A plastic and copper device is put into the uterus. Lasts five or more years. It works mainly by stopping the egg and sperm from meeting. It may also prevent the fertilised egg from attaching to the lining of the uterus. The copper also has a spermicidal effect (kills sperm).

- *advantages* - Very effective. Do not have to remember to take pills.
- *disadvantages* - Periods may get heavier or more painful. Small risk of serious problems.

Hormone releasing intrauterine system (IUS)

A plastic device that contains a progestogen hormone is put into the uterus. The progestogen is released at a slow but constant rate. More than 99% effective. Works by making the lining of your uterus thinner so it is less likely to accept a fertilised egg. Also thickens the mucus from your cervix. Is also used to treat heavy periods (menorrhagia).
advantages - Very effective. Do not have to remember to take pills. Periods become light or stop altogether.
disadvantages - Side-effects may occur as with other progestogen methods such as the POP, implant and injection. However, they are much less likely as the hormone is mainly confined to the uterus (little gets into the bloodstream).

Natural methods

This involves fertility awareness. Effective if done correctly. Requires commitment and regular checking of fertility indicators such as body temperature and cervical secretions.
advantages - No side-effects or medical risks.
disadvantages - May not be as reliable as other methods. Fertility awareness needs proper instruction and takes 3-6 menstrual cycles to learn properly.

Sterilisation

Involves an operation. Is more than 99% effective. Vasectomy (male sterilisation) stops sperm travelling from the testes. Female sterilisation prevents the egg from travelling along the fallopian tubes to meet a sperm. Vasectomy is easier and more effective than female sterilisation. Popular when family is complete.
advantages - Very effective. Do not have to think further about contraception.
disadvantages - Very difficult to reverse. Female sterilisation usually needs a general anaesthetic.

Emergency contraception

Can be used if you had sex without using contraception. Also, if you had sex but there was a mistake with contraception. For example, a split condom or if you missed taking your usual contraceptive pills.

- *Emergency contraception pills* - are usually effective if started within 72 hours of unprotected sex. Can be bought at pharmacies or prescribed by a doctor. It works either by preventing or postponing ovulation or by preventing the fertilised egg from settling in the uterus (womb).
- *An IUD* - inserted by a doctor or nurse can be used for emergency contraception up to five days after unprotected sex.

Ectopic Preganacy

Mrs Scott is 32 yr old lady. She came to hospital complaining of abdominal pain and nausea. US scan reveals that she is having ectopic pregnancy. Explain this to her

Greeting, Introduction

Introduction:

Understand patient's knowledge and concerns

Ectopic pregnancy is an abnormal pregnancy. Most ectopic pregnancies occur when a fertilised egg attaches some where other than the usual place in the womb. Due to this pregnancy can not continue. If we let it continue it may lead to serious complications.

The pregnancy often dies after a few days or the pregnancy may grow for a while in the narrow fallopian tube. This can stretch the tube and cause serious problems including rupture of the tube Usual treatment is surgery. This involves the removal of the tube (either the whole tube or part of it) and the ectopic pregnancy. This is commonly performed by a laparoscopic operation (keyhole surgery.
Medical treatment of ectopic pregnancies: A medicine called methotrexate is often given, usually as an injection. It works by killing the cells of the pregnancy growing in the fallopian tube. It is normally only advised if the pregnancy is very early
There will be a small increase in the chance of having ectopic pregnancy in future and when you become pregnant next time early scan to rule out ectopic pregnancy can be peformed.

Endometriosis?

Mrs Simpson is diagnosed to have endometriosis. Explain and address her concerns

Greeting, Introduction

Introduction:

Understand patient's knowledge and concerns

The endometrium is the tissue that lines the inside of the uterus (womb). Endometriosis is a condition where endometrial tissue is found outside the uterus ie. in the pelvic area and lower abdomen, and rarely in other areas in the body

The exact cause is not known. It is thought that some cells from the lining of the uterus (the endometrium) get outside the uterus into the pelvic area. They get there by spilling backwards along the fallopian tubes when you have a period.

The 'spilt' endometrial cells then continue to survive next to the uterus, ovary, bladder, bowel, or fallopian tube. The cells respond to the female hormone oestrogen, just like the lining of the uterus does each month. Throughout each month the cells multiply and swell, and then break down as if ready to be shed at the time of your period. However, because they are trapped inside the pelvic area, they cannot escape. They form patches of tissue called endometriosis.

Patches of endometriosis tend to be 'sticky' and may join organs to each other. The medical term for this is adhesions. For example, the bladder or bowel may 'stick' to the uterus. Large patches of endometriosis may form into cysts which bleed each month when you have a period. The cysts can fill with dark blood known as 'chocolate cysts'.
The main aims of treatment are to improve symptoms such as pain and heavy periods. Also, to improve fertility if this is affected. There are various treatment options

Painkillers

Paracetamol, Anti-inflammatory painkillers, Codeine.

Hormone treatments for endometriosis

The combined oral contraceptive pill ('the pill')

The pill is not licensed for the treatment of endometriosis. However, many women report improved symptoms when they are on 'the pill'. The pill stops ovulation which reduces the amount of oestrogen made by the ovaries. Periods are also lighter and less painful. Other symptoms such as painful sex, and pain in the pelvic area may also improve.

The intrauterine system (IUS)

It is a popular type of contraceptive. However, it can also reduce endometriosis-associated pain. It also greatly reduces or even abolishes bleeding of periods. Once put in place, it can remain effective (for contraception and to ease pain) for up to five years.

GnRH (gonadotrophin releasing hormone) analogues, Progestogen hormone tablets, Danazol and gestrinone are other options

Surgery

Sometimes an operation is advised to remove some of the larger patches of endometriosis. This is usually done by laparoscopic surgery.

If you have completed your family, and other treatments have not worked well, a hysterectomy (removal of the uterus) and removal of the ovaries may be an option. This has a high chance of success for curing the symptoms.

OSTEOPOROSIS

Mrs Lucy is 68 years old. She has been diagnosed with Osteoporosis. Inform her about this condition.

Hello Mrs Lucy, good morning. I am Dr Kumar, one of the junior doctors in this hospital. I am here to talk to you about osteoporosis. Is that ok?

Osteoporosis is a condition in which bones become thin. It is a common condition in women after menopause. Osteoporosis occurs due to lack of chemical substance called hormones. Ovary which is an egg producing gland produces hormones called estrogen. Due to deficiency of estrogen, osteoporosis occurs.

Osteoporotic bones are prone for fracture. To make bones thick and avoid fracture we will give medicine and at the same time I will advise that you take the following measures -:

1. Avoid smoking
2. Do gentle and regular exercise
3. Eat food which contains calcium and vitamin D – Such as milk and mild products, green leafy vegetables. I will refer you to a dietician and she will tell you more about it.
4. Medicines are there, they are hormone replacement therapy, bisphosphonate and calcium, and vitamin D tablets.

HRT is hormones called estrogen and progesterone. It is available in many forms like tablets, injection or nasal spray. You should not take this medicine if you have had breast and endometrial cancer in the past, or even if you have had clots in legs and lungs.

Up to 5 years you can take this HRT safely. It will not cause period or weight gain.

If you are not suitable for this HRT and other option is there, which is known as bisohosphonate. This makes bones strong and thick, and reduces fracture rate.

CIN II

Mrs Carmel is 36 years old; she has been diagnosed with CIN II. Inform her about this

Hello Mrs Carmel, good morning. I am Dr and I am one of the junior doctors in this hospital. I am here to talk to you about the result of your cervical smear. Is that alright with you?

The results smear shows that cells in the neck of the womb are abnormal. These abnormal cells are not cancer cells. This can be due to infection as well. But if we do not treat this, cells can become cancer cells in due course of time, maybe after 10-15 years later. That's why a thorough examination is important and necessary.

Keep the above mentioned things in mind. We are going to refer you to colposcopy clinic as cervical smear results are not confirmatory.

Colposcopy is just like the cervical smear procedure. It is a outpatient procedure. It does not hurt, though it may cause discomfort as a biopsy is taken. There is no need for anaesthesia. It takes about 10-15 minutes. We will use dye to stain the inside of cervix. A biopsy is taken from abnormal looking areas. Colposcope is an instrument which helps in better magnified visualisation of the cervix. No part of colposcope will touch you. After taking the biopsy, we will send it to the pathologist for the result. This biopsy result is confirmatory result.

You may bleed after the biopsy for one or two days. At the same time you can stain the underpants for a few days because of the dye. Usually results will come within 1-2 weeks. Depending upon the result we will opt for observation or treatment.

Usual treatment options are -:

1. Ablative treatment
2. Loop excision
3. Cone biopsy

Treatment differs from hospital to hospital. The result of the treatment is almost 100% successful.

After this we will do one more cervical smear after 6 months. If that is normal another smear is done after another 6 months. Then we will do a cervical smear every year, for 9 years.

DIABETES IN PREGANANCY

Mrs Sophie R/C/O NIDDM is 36 years old. She wants to become pregnant and is diabetic. Talk to her

Hello Mrs Sophie, good morning. I am Dr Kumar and I am one of the junior doctors in this hospital. I am here to talk to you about diabetes in pregnancy. Is that alright with you?

In diabetes during pregnancy, we have to be careful so that blood sugars will be maintained at a normal level. Before getting pregnant, it is important to consult your GP, obstetrician and dietician. Before pregnancy we will advise you to take high dose of folic acid 3 months before and after pregnancy. At the same time, the blood sugar level should be at a normal level 3 months before and during pregnancy. Normal blood sugar level as well as folic acid will minimise the risk of complications in child. The high dose of folic acid is not available over the counter. It has to be prescribed by doctors.

I am taking metformin. Do I need to change?

Insulin is the only medicine which is licensed for use in pregnancy. However there is evidence of safety of use of Metformin in pregnancy and you can continue to use it so long as you understand that.

Will the dose and amount of insulin be more during pregnancy?

Yes, the dose and number of insulin injections will be more in pregnancy.

Because the demand of insulin increases and we need a tight control over blood sugar levels. For that reason we usually give one long acting insulin, and three short acting insulin.

Frequent blood sugar level measurement is necessary. You may have to check your blood sugar 6 times a day.

What are complications of diabetes in pregnancy?

If blood sugar level is not maintained then chances are that baby can be too big or too small. Baby can have some defect of heart or brain. Obstructed labour and we have to perform caesarean section.

What about hypo?

As we aim to maintain tight control of sugar level hypos are not unknown. We will teach you, your family member and friends how to treat hypo. Features of hypo are palpitation, sweating, hunger pain, fits, coma etc.

Whenever you feel the above mention symptoms drink a sugary drink.
If you are drowsy, but you are able to maintain airways or if you are comatosed, then your friends or family should give Glucagon. This is given subcutaneously. Our diabetic nurse will teach you how to give it and then they should bring you to hospital.

PAIN MANAGEMENT DURING DELIVERY

Mrs Sakira is 32 years old. She is anxious about pain during labour. She is 37 weeks pregnant. Talk about pain management during delivery.
Hello Mrs Sakira, good morning. I am Dr Kumar and I am one of the junior doctors in this hospital. I am here to talk to you about pain management during labour. Is that alright with you?
Find out what are the reasons for her anxiety and what does she already know

Options

One is breathing exercise. We will teach you how to do breathing exercise, though this may not relieve you from pain but it will reduce anxiety.
To reduce anxiety, you can choose a birth partner. The birth partner will accompany you in the labour suit.
The most used medication is gas and air, it is otherwise known as entonox. (It contains oxygen & nitrous oxide) It is taken through a face mask. It is very safe and highly effective.
One electronic gadget which is known as TENS (Trans electrical nerve stimulation) can be used to reduce pain. It is worn like a belt. You can move with this instrument; however it may not reduce pain sufficiently for which you have to use other option like gas and air or epidural injection.
Epidural injections are also there. They are most effective and highly safe. In this we will put medicine in the spinal cord. First we will put needle, then a thin pipe through this pipe; we will inject medicine inside the spinal canal. This procedure will be performed by an anaesthetist. After epidural you will be numb down below. You will not be able to walk. Sometimes it is difficult to perform this procedure. However, complimentary medicines like hypnosis or acupuncture are available. These services should be provided by a registered and trained person. These services are usually not provided by the NHS.
In some hospitals, birth pool is available. In this you can labour and deliver in the pool.
Pethidine or Diamorphine injection can be used during early stage of labour. After delivering, baby can seem drowsy but we will take care of that. It is also a good alternative.

STILL BIRTH

Mrs Sophie is 32 years old. She came to hospital. She is pregnant for 30 weeks. Scan Shows baby is not alive. Break bad news. You are the SHO in OBG.
Hello Mrs Sophie, good morning. I am Dr Kumas and I am one of the junior doctors in this hospital. I am here to talk to you about the scan. Is that ok with you?

Sets the scene: Give Clues about the bad news (Do you want some one to be present while I explain the results)
When you feel that the patient is ready, break the news sensitively and clearly
Well Mrs Sophie, I am afraid to say that I have bad news for you.
I am sorry too say that the scan shows that baby is no longer alive.
Offer tissues If cries and pause. Then ask, are you ok?
Next step is to discuss the delivery of the baby. Labour may stat on its own but may take a few days. If the patient does not want to wait, labour may be induced. We will admit you in hospital and we will give you medicine. We will aim to deliver the baby vaginally.

What will happen if I carry the baby for some more days?

It can cause generalized infection and sometimes there may be a problem with the clotting factors an there could be bleeding. If patient not keen on induction of labour, cotting profile needs to be done and repeated at regular intervals.

Why has it happened?

At the moment, it is difficult to tell. However we can do a few tests on you and an internal examination (post mortem) of the baby can be done.

When can I plan for pregnancy?
Whenever you feel physically and mentally fit for a pregnancy, you can try again.

OVARIAN CYSTECTOMY

Mrs Samuel is 36 years old. She is having multiple cysts in both ovaries. She has been planned for ovarian cystectomy. Talk to her.
Hello Mrs Samual, good morning. I am Dr Kumar one of the junior doctors in this hospital. I am here to talk to you about ovarian cystectomy. Is that alright with you?
Cyst is a cavity which contains fluid. This cyst can rupture and then you can have severe pain. In which case, we have to do urgent operation. Sometimes cysts can rotate on there own axis, this is known as torsion of cyst. Again, this will give you severe pain which requires operation. Though the blood tests and scan finding do not suggest that it is cancer, we would like to remove it and let the pathologist look at it under the microscope to confirm it because of its size. Keeping this thing in mind we are going to remove the cyst.

This operation is a major operation and it is performed under general anaesthesia, in which we will put you to sleep. The duration of the operation is about 1 hr. The incision will be 5-6 inches long. It is a bikini line incision that is from side to side. If the cyst is very big we may need to put an upand down cut.

During this operation we will see whether the ovaries are normal or not. If the ovary is completely compressed by the cyst and is not healthy then we may have to take out the ovary along with the cyst.

You will wake up in the recovery room. You will have a catheter (pipe) in your bladder which will come out the next day.

The duration of hospital stay is about 2 days.

What are the complications?
Possible complications are:-

1. Pain
2. Infection
3. Bleeding
4. Injury to surrounding structure ie. Bladder, bowel, ureters or blood vessels

When can I go to work?
Well, this is a major operation; your body will take some time to recover. I think it will be better to rest for at least a month. Then you can judge for yourself whether it's fine to work or not there after.

- Preparation
- CN1-*olfactory*-ask about smell
- CN2-*optic*
  visual aquity
  -colour vision
  -visual Inattention
  -visual field (confrontation test)
  -light reflexes (direct and consensual)
  -accommodation
  -fundoscopy - only mention
- CN3-*occulomotor*-3, 4 and 6 are examined together
- - remember LR6(SO4)3
- CN4-*Trochlear*- as above
- CN5-*Trigeminal*
  -sensory: 3divisions +corneal reflex (only Mention)
  -Motor-clench teeth, open mouth and jaw jerk
- CN6-*Abducent*-with 3rd and 4th
- CN7-F*acial*- sensory & Motor

Preparation

"Good morning Mr/Mrs -----. My name is Dr. XXXX, and I'm one of the junior doctors here on the unit. I have been asked to examine the nerves of your face. Will that be all right? I will try to be gentle, but please feel free to stop me if you feel any discomfort"

CN I –Olfactory Nerve

Ask the patient "Has your sense of smell changed recently? " You can also mention taste as well - sensory component of Cranial Nerve VII Facial Nerve .

CN II-Optic

Visual Acuity

Formally tested with snellen's chart.

Test each eye separately, ask patient to close other eye

Ask the patient to read some print or to count fingers.

Colour Vision

Formally tested with Ishihara's chart. As a rough guide ask the patient whether they have any problems with the colours of the traffic light. Alternatively point to some different coloured objects in the room or the hat pins can be used.

Visual Inattention

Ask the patient to look directly at your eyes and keep them fixed there.

Place your index fingers just at the periphery of the temporal field of vision. Move your index fingers first in turn and then at the same time. Ask the patient to simply point to the finger that moves. In the presence of inattention, the patient will only point to one finger when both the fingers are moved. This denotes a parietal lobe lesion.

Visual Fields – confrontation test

First, ensure you have the correct position; and this is sat directly opposite the patient facing them.

For the peripheral field, ask the patient to cover their right eye with their right hand and close your left eye.

Start with the temporal field. With the hand stretched out at the far left, start to move your wagging finger (or the white hat pin) from the periphery to centre from both the upper and lower temporal quadrants. Let the patient know that they should inform you when they first see the movement of the finger.

Asking the patient "Do you see it moving all the way" will also pick up gross defects in the field of vision.

Change your hands to repeat on the nasal side. Repeat for the left eye in the exact same way. **Go slowly** - don't rush as you may miss a visual field defect.

You might wish to test for the central visual field as well (detailed below). The following tests can also be done at this step – they will test cranial nerve II and III

Direct and Consensual Light reflex

Stand at the side of the patient and ask the patient to fix their gaze straight ahead at a pre-defined point in the room.

Shine the torch into the eye - look at the eye the light is shone: watch for constriction of the pupil confirming that direct reflex is present. The second time look into the other eye in which light is not shone to see if the pupil constricts confirming the consensual reflex action. Repeat the above for the other eye.

Check for afferent papillary defect(s) by swinging the light from one eye to the other. (optional)

Accommodation

Patient should fix their gaze straight ahead at a distant point.

Then bring your index finger close to the tip of the nose and ask them to focus intently on it. Look at the eyes; they should converge & the pupils constrict.

Finish the above two steps if all findings are normal by saying "pupils are bilaterally symmetrical and reactive to light and accommodation. (PERLA)

Fundoscopy

Mention the need for Fundoscopy as well.

Occulomotor Cranial Nerve CN III Trochlear Cranial Nerve CN IV Abducent Cranial Nerve VI

These nerves are tested together because all three are responsible for ocular movements and also testing these now saves valuable time later on.

Cranial Nerve	Muscle Supplied
Occulomotor CN iii	All other ocular muscles
Trochlear CN iv	Superior oblique
Abducent CN vi	Lateral rectus

Remember; the pneumonics-LR6(SO4)3-meaning lateral rectus by 6th nerve, superior oblique by 4th and whole (meaning rest) by third

Sit opposite the patient - Look out for ptosis/alignment of the eyes. Ask the patient to follow your index finger with their eyes. They should let you know if they see double vision.

Move your fingers in a "H" pattern covering all of the horizontal and vertical axes. This tests the pursuit movements of the eyes.

Now check for saccadic movements by asking the patient to look from side to side rapidly ("Look at my palm and now my fist". This brings out internuclear ophtalmoplegia which might indicate demyelination.

Comment on your findings – "extraocular movements are free and full with no nystagmus or diplopia."

Trigeminal Nerve CN V

Remember; it has two parts, a sensory and motor part - always examine both components.

Sensory

Ask the patient to close their eyes and touch both sides of the forehead (ophthalmic division) then their cheeks (maxillary division) and the jaw (mandibular division) with the wisp of cotton confirming whether it feels the same on both sides and can they appreciate it at all . **Always compare both sides.**
Mention that you would also like to test for the corneal reflex (where a wisp of cotton is taken and the junction of the sclera and cornea is touched eliciting a blinking action) as well.

Motor

Ask the patient to clench the teeth and feel both masseters and temporalis. "Clench your teeth together for me".

Ask the patient to open the mouth against some resistance to check the pterygoid muscles."Open your mouth – don't let me close it". Complete the examination with Jaw jerk.

Facial Nerve CN VII

This also has two components; a sensory and a motor.

Sensory

You can simply ask whether they have had any change in their sensation of taste at all.

Motor

Observe for any obvious weakness; for instance flattening of nasolabial folds or involuntary movements e.g hemifacial spasm.

"Please close your eyes tight - now let me open them".

"Show me your teeth" or "give me a smile".

"Puff out your cheeks".

"Raise your eyebrows" or "wrinkle your forehead for me".

2-EXAMINATION OF CRANIAL NERVES VIII-XII

CN VIII-*Vestibulocochlear*
cochlear-inspection
- hearing test - fingers
- Tuning forks- rhinne and waber
-mention otoscopy
Vestibular-Nystagmus
-Romberg
-Gait
-other test

CN IX-*Glosopharyngeal*
-uvula
-speech
-mention Gag reflex
CN X- *Vagus*
- as in IX
CN XI-*Accessory*
-shrug your shoulder
-turn head from side to side
CN XII

Cranial Nerve VIII-Vestibulocochlear

This nerve has two components; a vestibular and cochlear

Cochlear component

- Inspect BOTH ears while looking for ……..

- Discharge
- Bleeding
- Vesicles
- Hearing aids
- Hearing can be tested by rubbing your fingers held close to the patients ear

TUNING FORK TESTS

Rinnes

- You are comparing two components of hearing - air conduction and the bone conduction.
- Take a tuning fork either of 512hz or 256hz frequency (make sure you check!)
- Test for air conduction - hold the vibrating tuning fork parallel to the external auditory meatus of the ear.
- Then test for bone conduction by placing the base of the tuning fork on the mastoid process.

Normally Rinne is positive

- If Air Conduction>Bone Conduction then hearing is normal or denotes sensory neural hearing loss.
- If Bone Conduction>Air Conduction then this is conductive hearing loss.

Weber's test

- Now test for Weber's– place the base of the tuning fork on the vertex of the skull of the patient. Simply ask the patient where they hear it best..

Interpretation

- *Lateralizes to the good ear in Sensory Neural Loss*
- *Lateralises to the affected ear in Conductive Loss*
- *Midline this is normal or denotes Bilateral Hearing Loss*

. Then mention that you would also like to do an otoscopy.

Vestibular component:

1. Check for Nystagmus
2. Rombergs test: Ask them to stand with their feet together hands by sides and close their eyes. Be standing right next to them and remain ready to catch them if they fall. Positive Romberg's test is if the patient is more unsteady and tends to fall over with the eyes close. This indicates sensory ataxia and NOT cerebellar ataxia.
3. Check for gait. Make sure you walk with them so that you are able to hold them if they fall
4. Other tests: caloric test.

CN IX GLOSSOPHARYNGEAL NERVE
and
CN X VAGUS NERVE

- "Open your mouth open please – now say "AAH" : look to see whether the uvula is central and the palatine arches rise symmetrically.
- Assess quality of speech "No nasal intonation".
- Say you would also like to check the gag reflex of the patient.

CN XI -ACCSESSORY NERVE

- "Shrug your shoulders please" – "Now don't let me push them down again".
- Then ask them to turn their face to the left against some resistance and palpate the sternocleidomastoid of the right side and then repeat the steps vice versa. "Please turn your head to the right and now to the left".

CN XII -HYPOGLOSSAL NERVE

- Ask the patient to open their mouth: look for any fasciculation or wasting of the tongue.
- Ask the patient to stick their tongue out - it will deviate to the side of the lesion.

- Then ask them to push their tongue against the inside of their cheeks against resistance

3-EXAMINATION OF VISUAL FIELDS

Visual acuity
Visual inattention
colour vision
visual fields - peripheral and central
light reflex

- Start with the VISUAL ACUITY ALWAYS! Tell the examiner you are doing so to rule out any potential monocular blindness.
- Check for visual inattention.
- Ensure that the patient has got fully intact colour vision (if you are using the white and red hat pin).
- Check for peripheral visual fields as above - the peripheral visual fields can also be tested easily with the white hat pin.
- The central visual fields are tested with a red headed pin.

Compare patient's right eye with your left as outlined above.
Move the red headed pin slowly at the patients eye level from the temporal field to the centre and then to the nasal field.
Tell the patient to inform you if the colour of the head of the pin changes or the head disappears completely. If there is central scotoma there will be loss of central field of vision.
The blind spot can also similarly be compared along the same lines (enlarged in papilloedema).

- If you have spare time while doing the light reflexes might yield useful findings like the RAPD in optic neuritis.

TUNNEL VISION	BITEMPORAL HEMIANOPIA
Glaucoma Retinitis Pigmentosa Choridoretinitis Papiloedema	Pituitary Tumor Meningioma Craniopharyngioma

4-VESTIBULOCOCHLEAR NERVE CN VIII

- This is essentially the same exam as before but with some added components - to try and localize the lesion.
- Test the Cochlear Component.
- Test the Vestibular Component.
- Perform one or two cerebellar signs.
- Otoscopy.
- Mention that you would like to check Cranial Nerves V,VI,VII, IX and X to rule out the possibility of an Acoustic Neuroma.

5-EVALUATION OF A PATIENT WITH DIZZINESS / VERTIGO

Ask when does patient feels dizzy Pallor pulse CN VIII Otoscopy Cerebellar examination-gait, Romberg mention -examination of the heart -Carotid auscultation -Cervical spine -Hallpike's test

- First start off by asking "Do you feel dizzy all the time or only when you stand up"; as postural hypotension is a common cause of "dizziness". A standing and lying BP would of course exclude this.
- Pallor – anaemia can make patients dizzy
- Pulse – heart blocks can be symptomatic

- Assessment of cranial Nerve VIII as above
- Otoscopy
- Cerebellar examination – do one or two test for the assessment of cerebellum
- Romberg's test
- Assessment of gait
- Mention that you would like to the examination finish by
- Auscultation of the heart and carotid artery
- Examination of cervical spine
- Detailed neurological assessment
- Hallpike's test (test for Benign Paroxysmal positional vertigo)

Causes of Vertigo:

1, Peripheral causes – related to ear
Meniere's disease (vertigo + Sensorineural hearing loss + tinnitus)
Benign positional vertigo
Acute Labyrinthitis
Wax or infection.
Motion sickness
Ramsay hunt syndrome
Drugs e.g. aminoglycosides
2. Central causes
Migraine
Stroke

Multiple sclerosis
3. Cerebellar problems including cerebello – pontine angle tumour
4. Cervical spondylosis

In a history taking station of vertigo; questions should be tailored to cover these areas.

6-EVALUATION OF A PATIENT WITH DIPLOPIA

Preparation Inspection Ocular movements Direction True and false image

Preparation:

- First confirm that the patient indeed has or is experiencing double vision.
- Secondly confirm whether it is monocular or binocular diplopia. Monocular dipolpia usually indicates an ocular abnormality such as a refractive error or retinal pathology
- Thirdly localize which eye is responsible for diplopia and exactly which muscle is responsible.

- ***Inspect*** the eyes looking for : Ptosis, proptosis, alignment of eyes, head tilt, stigmata of head injury, aural discharge, neck swelling etc.

- Test the ***ocular movements*** in an H shape fully in the vertical and horizontal axis.

Are the images separated horizontally (side by side) or vertically? Horizontal separation is likely to indicate sixth nerve palsy or a medial rectus palsy (rare in isolation).

- In which ***direction*** is the diplopia worse? – The direction of the gaze in which the images are separated widely is the direction of action of the paretic muscle.
- Once you know which direction double vision is seen; then ask them exactly ***what they see.***
- The outer image is the ***false image*** - patients often say the image is hazy or indistinct (seen by the eye with muscle weakness). The inner image is the ***true image*** that's seen by the normal eye. By covering the paretic eye the false image disappears.
- Ask can you read the newspaper ok? Or do you have any problems getting down the stairs? These problems would indicate Superior Oblique Palsy.
- Ask patient to count 1-20 in a single breath, if they tire suggests Myasthenia Gravis.
- Check the direct and consensual reflex.
- Assess cerebellar system - Multiple sclerosis.
- Finish by saying "I would like to do a Fundoscopy and a complete neurological exam."

7-NEUROLOGICAL EXAMINATION OF UPPER LIMB

Preparation Inspection Tone Power Pulses Reflexes Sensation

Function
Thank the patient

Preparation:

- Greeting /Introduction.
- Establishes identity of the patient.
- Empathy/ ensures comfort of patient.
- Explains purpose of the visit/nature of the examination.
- Takes full consent for examination.
- Appropriate exposure.
- Chaperone.

Inspection:

- Wasting
- Fasiculation
- Abnormal movements/tremor
- Abnormal posturing/deformities
- Check for pronator drift by asking patient to hold their arms out with palms facing up and then close their eyes. Look for any drift of the arm suggestive of weakness. Also look for any winging of scapulae.

Tone:

First ask the patient if they have sore arms or hands. Ask them to let the arms go floppy. Passively bend the arm at the elbow joint and in the hands including the wrist in a rotary manner.

Power:

- Shoulder abduction: "Hold your arms out to the side – stop me from pushing them down": indicates Supraspinatus and deltoid.
- Shoulder adduction: "Now push me down" : multiple muscles including pectoralis major.
- Elbow flexion: "Bend your elbow – don't let me straighten it" : Biceps,brachioradialis
- Elbow extension: "Now straighten it " (resist extension) : Triceps
- Wrist extension : "Cock your wrist up – don't let me bend it down"
- Wrist flexion : "Bend your wrist down – now don't let me straighten it out"
- Finger flexion : "Squeeze my fingers tight please"
- Finger extension: "Hold your fingers out – don't let me bend them" – radial
- Finger abduction : "spread your fingers apart – don't let me push them together" (Dorsal interossei) - ulnar
- Finger adduction : "Hold this paper between your fingers – now don't let me pull it away"(Palmar interossei) – ulnar
- "Hold your thumb and little finger together – now don't let me pull them apart" (Opponens pollicis) – Median nerve

Pulses:

- Quickly assess the vascular status by taking the pulses and checking capillary refill.

Reflexes:

- Biceps,
- Triceps,
- Supination jerks.
- Hoffman's sign - place your right index finger under the distal interphlangeal joint of the patient's middle finger. Use your right thumb to flick the patient's finger downwards. Look for any reflex flexion on the patients fingers.

Sensation:

Pinprick

- Use neurotip.
- Let patient know which the sharp and blunt end is by using the sternum as a baseline.
- Ask the patience to close their eyes and to report to you whether it is sharp or blunt.
- Assess the sensation over the various dermatomes of the upper limb.
- With distal sensory impairment establish a sensory level
- DON'T FORGET TO BIN IT IN THE SHARPS BIN AFTERWARDS!!!!!!!!!!!!!!!!!!!

Propioception:

- Hold the middle finger of the hand and stabilise the joint distally by holding it on the sides.
- With the patient's eyes open demonstrate that you will be moving the joint "UP" (towards their head) and "DOWN" (in the reverse direction).
- Then ask them to close their eyes for you.
- Gently move the distal joint up and down and ask the patient to report the direction of movement back to you.

Vibration

- Use a 128hz tuning fork.
- Allow the patient to appreciate the vibration sense first over the sternum.
- Then hold the vibrating tuning fork over the distal interphalyngeal joint.

Co-ordination –

- elicit one of the cerebellar signs (also known as the finger nose test)

Function

- Ask patient to pick up a pen and write with it or undo and redo one of their shirt buttons.
- Thank the patient for their time.

8-NEUROLOGICAL EXAMINATION OF LOWER LIMB.

Preparation Inspection Tone Power Pulse Reflex Sensation Co-ordination Funtion	**Preparation** • Greeting/introduction. • Establishes identity of the patient / rapport. • Empathy/checks the comfort of the patient. • Explains purpose of visit/nature of exam. • Takes full consent for examination. • Asks for chaperone. • Appropriate exposure.

Inspection

Wasting
Fasiculation
Abnormal movements/tremor
Abnormal posturing/deformities

Tone:

First ask the patient if they experience any soreness in the legs. Ask them to relax. Then either log roll the legs at the hips, then lift the knee and let it drop gently down.

Power-

- Hip flexion : "Lift your leg towards the ceiling – don't let me push it down"
- Hip extension : "Now push me down" (with your hands behind their thigh)
- Knee flexion : "Bend your knee – now don't let me straighten it out again"
- Knee extension : "Now push against my hand" (with your hand on the shin)
- Ankle dorsiflexion : "Cock up your foot - don't let me pull it back down"
- Ankle plantar flexions : "Now push me down" (with your hand on the sole)

If time allows you can check for ankle inversion/eversion.

A	Grade 5	No weakness.
B	Grade 4	Movement against gravity and resistance.
C	Grade 3	Movement against gravity but not against resistance.
D	Grade 2	Movement with gravity eliminated.
E	Grade 1	Flicker of contraction
F	Grade 0	No movement.

Pulses

Reflexes –

- Knee,
- Ankle,
- and Plantar reflex.

Sensations:

Pinprick

- Use neurotip.
- Let patient know which the sharp and blunt end is by using the sternum as a baseline.
- Ask them to close their eyes and to report back whether it is sharp or blunt.

- Assess the sensation over the various dermatomes of the lower limb.
- With distal sensory impairment establish a sensory level e.g in diabetic foot.
- DON'T FORGET TO BIN IT IN THE SHARPS BIN AFTERWARDS!!!!!!!!!!!!!!!!!!

Propioception

- Hold the big toe of the patient and stabilise the joint distally by holding it on the sides.
- With the patient's eyes open demonstrate that you will be moving the toe "UP" (towards their head) and "DOWN" (in the reverse direction).
- Then ask them to close their eyes again.
- Gently move the distal joint up and down and ask the patient to report the direction of movement.

Vibration

- Use a 128hz tuning fork not
- Allow the patient to appreciate the vibration sense first over the sternum.
- Then hold the vibrating tuning fork over the distal interphalyngeal joint. If the patient does not report any appreciation, then test at medial malleoli, then knee, then iliac crest if it is impaired distally.

Co-ordination-

Ask the patient to lift their leg high in the air and then touch the knee of the other leg with the heel of the raised leg by bringing it down and then they should slide their leg down against the shin of the other leg.

Function-

Ask the patient if they are ok to stand and if so then ask them to take a few steps to assess the level of gait. Then watch them walk heel to toe. Make sure you walk with the patient to support them in case they are unsteady. Finally perform romberg's test. Make sure you are with the patient during the entire assessment.

9-EXAMINATION OF DIABETIC FOOT

Mr Anderson has been complaining of pins and needles in his right leg. He is a diabetic and is on insulin. Examine his foot please.

Preparation Inspection Palpation-temperature -pulses -sensation Gait Motor Function Reflexes Footwear

Preparation

- Greeting/Introduction
- Establishes identity of the patient
- Empathy/checks comfort of patient
- Explains purpose of visit/nature of examination
- Asks patient to undress
- Asks for a chaperone
- Takes consent for examination

Inspection:

- Claw toes/Pes Cavus
- Callus formation
- Ulcers/Gangrene
- Looks for ulcers between toes
- Skin, nails and hairs

Palpation

- Feels for *temperature*
- Peripheral *Pulses*
- *Sensations* (find out the patients level of sensory impairment)
- Fine touch
- Pin prick
- Vibration
- Joint position

Assessment of **Gait**
Assessment of **Motor functions**
Assessment of **reflexes**
Checks suitability of **footwear**
Overall approach to the task
Thank the patient for their time

10-Annual review of a Diabetic Patient

History
BMI
Urine dip
Blood tests
BP
Eyes
Habits
Diabetic Diary
Feet
Compliance

- **History**- Angina, Claudication, hypoglycaemia and common side effects of drugs
- *Body mass index.*
- *Urine* dip– glucose , protein – albumin/creatitine ratio
- *Blood Tests* : HbA1c; Urea and electrolytes , Cholesterol; LFT's particularly if on Metformin, TFT at 3 yearly intervals
- *B.P.*
- *Eyes* : visual acuity and retinal assessment
- *Habits* - ? Smoking ? alcohol intake ; exercise ; check for compliance including diet
- Review *diabetic diary* – check for home monitoring results and hypoglycaemic episodes
- Assessment of feet
- Compliance - correct tablet/insulin regime (injection sites)
- Address any other problems or concerns and educate
- Discuss future targets

11-Glasgow coma scale

Best Motor Response
6 Carrying out request ('obeying command') -patient does simple things that you ask.
5 Localising response to pain. (apply over nail bed)
4 Withdrawal to pain - pulls limb away from painful stimulus.
3 Flexor response to pain - pressure on nail bed causes abnormal flexion of limbs - decorticate posture.
2 Extensor posturing to pain - stimulus causes limb extension - decerebrate posture.
1 No response to pain at all.

Best Verbal Response
5 Oriented
4 Confused conversation
3 Inappropriate speech
2 Incomprehensible speech - no words uttered, only moaning.
1 No verbal response.

Eye Opening
4 Spontaneous eye opening
3 Eye opening in response to ongoing speech
2 Eye opening in response to pain
1 No eye opening.

12-EXAMINATION OF PATIENT WITH MENINGITIS

Preparation
Temperature
Rash
Neck stiffness
Kernig's sign
Ear and Nose
Palpating for tenderness
Eyes
oral hygiene
cranial nerves and brief neurology
Reflexes
Systemic examination

Preparation

- Greeting/Introduction
- Establishes identity of the patient/rapport.
- Empathy/checks the comfort of the patient. Offer painkillers if the patient is in pain. Is he photophobic? Would he prefer the light to be dimmed inside?
- Explains purpose of visit/nature of exam.
- Takes full consent for examination.
- Appropriate exposure and ABC and GCS.
- *Temperature.*

- Check for *rash.*
- Check for *neck stiffness* : Ask patient if it is ok to move their neck and ask them to bend their neck while touching their chest with their chin.
- *Kernig's sign*: Patient supine - flex the thigh so that it is at a right angle to the trunk – now completely extend the leg at the knee joint. If the leg cannot be completely extended due to pain, this is a sign of Kernig's.
- Check the *ear and nose* for any discharge; possible signs of head injury.
- Ask the patient if they are sore anywhere in the face before *palpating for tenderness*, i.e. sinusitis, mastoiditis.
- Examine *the eyes* - diplopia, Light reflexes- ask if they can manage; if they refuse don't force them.
- Check *oral hygiene* to rule out any potential dental infection.
- Check *cranial nerves and brief neurology* including plantars.
- Check Bicep, Knee and Plantar *reflexes*
- *Systemic examination* e.g. chest, abdomen to rule out possible infection elsewhere
- Thank and cover the patient.

13-EXAMINATION OF PATIENT WITH HEADACHE

A	
B	
C	
D	*Airway*
GCS	*Breathing* - respiratory rate and pattern
General appearance	*Circulation* - Blood pressure and pulse
Temperature	*GCS*
Head Injury	*General appearance* – photophobic
Examination of face	Temperature
Brief neurology	

Any stigmata *of head injury*
Eyes and periorbital areas - visual acuity, red eye (Glaucoma)
- lacrimation, flushing, red eye Cluster headache)
- pupils including light response
- Assessment of visual fields (space occupying lesion)
- Extraocular movements (opthalmoplegia)

Ear, Nose and Throat assessment - also check for dental hygiene issues
Check for sinus tenderness
Check for Mastoid tenderness
Check for tenderness of temporal artery
Check for tenderness over cervical spine
Palpate temporomandibular joint for tenderness and crepitus when patient opens and closes their jaw.
Check for Neck stiffness and Kernig's sign
Do *brief neurology* including remaining cranial nerves and upper and lower limbs as time permits.

PLAB RIGHT - PLAB II

Dr Swarup Patel

MRCOG

History

- Presenting Complaint
  - Duration
  - Type
  - Severity
  - Aggravating factors
  - Relieving factors
  - Medication/response
- Restriction of social activity
- Restriction of sexual activity
- Bowel/bladder

History

- Menstrual History
  - Menarche
  - Last menstrual period
  - Menstrual cycle – Duration of bleeding / Duration of cycle
  - Menopause – HRT – Post menopausal bleeding
- Smears
  - Regular
  - Last
  - Previous abnormal smears
  - Any treatment in the past
  - Following Smears

History

- Obstetric History
  - Number of pregnancies
  - Deliveries - Mode
  - Miscarriages
  - TOP – Termination Of Pregnancy
  - Difficulties
- Contraception
  - Present
  - Past - if Relevant

History

- Social History
  - Marital Status
  - Occupation
  - Smoking/Alcohol
  - Work/Drug history/Allergies
  - Partner/Family
- Follow Up
- Summarise
- Seniors/Multidisciplinary
- Leaflets
- Questions

Topics covered

- contraceptive advice
- Emergency Contraception
- Lower Abdominal pain
- Amenorrhea
- Ovarian cystectomy
- Urinary Incontinence

Topics covered

- Pre-eclampsia
- Eclampsia
- Intrauterine Death Management
- Osteoporosis
- Cervical cancer

Topics covered

- Antepartum Haemorrhage
- PID
- Miscarriage
- Ectopic Pregnancy
- STI

Contraceptive Advice

- Pills
  - COCP – Combined oral contraceptive Pill
  - POP – Progesterone only Pill - Minipill
- Failure Rate
- Mode Of Action
- 3 Weeks On 1 Week Off
- Continuous

Contraceptive Advice

- Precautions
  - Missed Pills
  - Antibiotics
  - Diarrhoea
  - Advise Condoms For STI
- Side Effects
  - Venous thromboembolism
  - Weight
  - Blood Pressure

Contraceptive Advice

Contraindications to COCP

- Pregnancy
- Migraines
- Smoking
- Age/BMI
- Liver Disease
- Porphyria
- Undiagnosed bleeding
- Breast Feeding

Contraceptive Advice

- **Minipill – Adv.**
  - Breast Feeding
  - High BMI
  - Smokers
- Side effect
  - Irregular Bleeding
- **Other Methods**
  - Coils
  - Depot Injections
  - Implants
  - Mirena IUS
  - Condoms – M/F
  - Sterilisation- M/F

Emergency Contraception

- Emergency Contraception
  - Levonorgestrol
  - Ella-One
  - IUCD

Lower Abdominal Pain

- History
  - Pain history
  - Menstrual irregularity/Dysmenorrhoea
  - Pelvic pain
  - Deep dyspareunia
  - Discharge PV
  - Bowel symptoms
  - Bladder symptoms
  - LMP-?Pregnant
  - Previous surgery
  - Previous STI/risk factors

Lower Abdominal Pain

- Gynaecological causes
  - PID
  - Endometriosis
  - Pregnancy related
  - Ovarian cyst-rupture/haemorrhage
- Surgical causes
- UTI

Ovarian Cystectomy

- Explain the procedure
- Admission, NBM
- Anaesthesia
- Recovery, Tubes, Drains
- Hospital stay
- Resumption of activities
- Benefits
- Complications

Ovarian Cystectomy

- Removal of both the ovaries, HRT
- Fitness
- Investigations
- Follow Up
- Leaflets
- Questions
- Consent

Amenorrhoea

- LMP
- ??Pregnancy
- Previous periods
- Menarche
- Weight Loss
- Head Injury
- Headaches
- Visual disturbances
- Medication
- Discharge from breast
- Contraception

Amenorrhoea

- PCOS
  - –Excessive hair growth
  - –Acne
  - –Weight gain
- Menopause
  - –Night sweats
  - –Hot flushes
  - –Mood swings
  - –Dry sex

Amenorrhoea

- H/O PPH (Sheehan's syndrome)
- H/O Surgical termination /Evacuation - followed by infection (Asherman's syndrome)
- Thyroid
  - – Weight Loss, palpitations, diarrhoea
  - – Weight Gain, tired, cold, constipation
- Psychological
  - – Recent moods
  - – Stress at work / home
  - – Appetite, sleep
  - – Feel hopeless, self harm

Urinary Incontinence

- Stress Incontinence
  - – Do you leak when you cough, laugh
  - – Ever leak while walking
  - – Need to wear pads
  - – Parity
  - – Duration of labour
  - – Weight of babies
  - – Pelvic floor exercise
  - – Lumps down below

Urinary Incontinence

- Diabetes
  - – Frequency During Day/Nocturia
  - – Polyuria
  - – Polyphagia
  - – Polydypsia
  - – Weight Loss
  - – Family History
- UTI/Bladder Pathology
  - – Burning
  - – Frequency
- Smoking
- Medication, tea/coffee
- Back problems, bowels

Urge Incontinence

- Symptoms/Complaints
  - –Rush
  - –Accidents
  - –Need to go again
  - –Incomplete emptying
  - –Need to get up at night
- Management
  - –Bladder re-training
  - –Physiotherapy, smoking, alcohol, fluids, tea/coffee/cola
  - –Medication, minimal surgical role

Urinary Incontinence(Stress)

- Management
- Pelvic floor exercise
- Physiotherapy referral
- Weight
- Cough
- Minimal medical role (Yentreve)

Preeclampsia

- History
  - Presenting complaints
  - Duration
  - Age (<20 :: >35)
  - Parity
  - Gestational age
  - Family history
  - Previous history

Preeclampsia

- Symptoms of imminent eclampsia
  - Headache
  - Visual disturbances
  - Epigastric pain or RUQ pain
  - Decreased urinary output
  - Edema – Sudden increase, facial edema
- Signs
  - Blood pressure
  - Proteinuria
  - Papillaedema
  - Reflexes

Preeclampsia

- Management
- Control high blood pressure
- Prevent convulsions
- Prevent complications
  - Antihypertensives – oral or IV
  - Blood tests – FBC, Coagulation, U & Es, LFTs, Urates
  - CTG
  - Growth scan
  - Induction of labour
  - CT scan

Preeclampsia

- Complications
  - Maternal
    - HELLP Syndrome
    - Eclampsia
    - Cerebral hemorrhage
    - Renal failure
    - Coagulation failure
    - Death
  - Fetal
    - IUGR
    - Abruption
    - IUD

Intrauterine Death Management

- Privacy
- Midwife
- Partner/family
- Give information
- Empathy
- Pause
- Tissues
- Further course of action

Intrauterine Death Management

- Photos
- Lock of hair
- Foot prints
- Hand prints
- Blood samples
- Swabs
- X - ray
- Skin biopsies
- Post-mortem

Intrauterine Death Management

- Parents karyotyping
- Post-mortem
- Hospital stay
- Funeral
- SANDS
- Future pregnancies, contraception
- Lactation suppression

Carcinoma Cervix

- Breaking bad news
- Family/friend
- Empathy
- Tissues
- Pause
- Explain diagnosis
- Pap smear history
- Staging
- Further investigations
- Further course of action
- Survival rate (95, 80, 50, 30)
- Complications of treatment

Miscarriage Counselling

- Give information
- Do not use the term abortion
- Partner/Family
- Empathy
- Pause
- Tissues
- Further course of action
- Management
  - Conservative
  - Medical evacuation
  - Surgical evacuation
- Consent
- Future pregnancy/ contraception

Ectopic Pregnancy

- History
  - LMP
  - Frequency of cycles
  - Pain/Bleeding
  - Onset, Duration, Severity, Type
  - Contraception - IUD/POP
  - STI/PID
  - Previous Ectopic
  - IVF pregnancy
  - Tubal Surgery
  - Bowel/Bladder
  - Dizziness/Fainting

Ectopic Pregnancy

- Examination
  - Vitals
  - Abdominal
  - Bimanual
  - Cx Excitation
  - Adnexal Mass
- Investigations
  - Triple Swabs
  - Urine pregnancy test
  - FBC
  - Group & Save
  - Serum Beta HCG
  - USS/TVS

Ectopic Pregnancy

- Explain the diagnosis
- Consequences
- Need For Surgery
- Counsel Regarding Operation
- Repeat HCG
- Differential Diagnosis
  - Ectopic pregnancy
  - Threatened Miscarriage
  - Ovarian Cyst
  - Appendicitis
  - Diverticulitis
  - PID
  - UTI

STI Counselling

- History
  - –Age
  - –Complaints
  - –No of sexual partners
  - –Parity
  - –H/O STI
  - –H/O Ectopic

STI Counselling

- Counselling
  - –Explain the diagnosis
  - –Referral to GUM clinic
  - –Partner screening
  - –Barrier contraception
  - –Long term sequelae
  - –Check swabs after treatment
  - –Leaflets
  - –Questions

Pelvic Inflammatory Disease

- History
  - – Age
  - – Partners in past year
  - – Prev STI
  - – Vaginal Discharge/Abdominal pain
  - – Menstrual History- Irregularity
  - – Contraception
  - – Acute presentation- Fever, Pain, Dysparenia
  - – Management
  - – Followup-GP, Patner tracing, Avoid sex till both treated.

Osteoporosis

- Define
- Problems
  - –fracture prone
- Healthly lifestyle
  - –diet, exercise, medicines
- HRT-risk and benefits

Antepartum Haemorrhage

- History
  - – Amount
  - – Painful/painless
  - – Following an event-trauma, fall, intercourse
- Obstetric History
  - – Risk factors- Placental position, PIH, PET, Diabetes, Multiple pregnancy
- Prev episodes
- Investigation
- Management

Sri Nagesh Panasa
SpR NW Deanery(01/08)

- INTRODUCTION
- TIPS
- SCENARIOS/ OSCE STATIONS
- QUESTIONS

INTRODUCTION

- Greeting, polite self introduction to parent / examiner
- Address with Miss/Mrs/Mr
- Proper surnames / If on phone ask whom you are speaking to / Write down
- Child's name (get it right 1st time round)
- Apologise any slips of tongue
- Information sheets about the condition

1. Relax... 2. Be cool and look confident.

3. Speak clearly and articulate your words well

4. Common courtesy is innate. And it looks natural and that will work

5. Don't sound mechanical. That will just show examiner you are regurgitating stuff. Be natural, be yourself. There is NOT only one way of doing things.

6. If you sound artificial, they assume you are not competent. Do not regurgitating stuff.

OSCEs / STATIONS

Sam 8yrs had road traffic accident while playing in skate board, resulting in the femoral fracture and ruptured spleen. Counsel the parents.

- Show empathy, Start by saying "I am sorry that --- was involved in that serious/nasty/unfortunate acc....
- Management of pain, fracture by orthopods
- Management of ruptured spleen
- Complications of splenectomy
- Pneumococcal vaccine, (Meningococcal& Influenza- given as primary Vacs)
- Penicillin prophylaxis

Alex is 7mo, brought to A & E by his mother for constant crying. History from mother. Discuss D D with examiner.

–History

Duration, frank / altered, what stage of bowel movt. Associated pain, Mucus

–DD

–Examination:

Full examination, if in doubt, senior to see, admit to observe and investigate, Plot on chart - Malnutrition

Do not say PR examination. If asked seniors may do.

Young mother brought her 4 month child who had been screaming for past few hours intermittently drawing her legs

- *History*
- *Examination*
- *Explain to mother*
- *Causes*
  - *?Viral infections, Meckel's diverticulum, polyps*
- *Management*

David is 3 mo. He was discharged from paediatric ward with infantile colic by consultant 3 days ago after being admitted for crying. All investigations were normal. Mother returned. Reassure her.

- *Talking to Mother* - Discuss Organic causes
  - Inquire of her health, social issues, felt helpless etc

Excessive / incessant crying child frequent visits to hospital

- *Child* - DD, examination (Do easy bits first)
- < 6 mo colic, trail of different milk, hypoalleregenic milk,try not > 1 wk
- Family support, Time out,maternal diet alteration
- No evidence drugs work
- *Talking to Mother* - Discuss Organic causes
  - Inquire of her health,social issues, felt helpless etc

4 yrs old child is brought in with history of recurrent wheeze & cough by mother. Elicit the history.

- *History*
  - About the symptoms, night cough/ sleep, Family H/O asthma, Eczema, hay fever, allergies
  - Affect on child's activities & family
  - How do symptoms get controlled?
- *Causes*
  - Bronchiolitis, Virus induced wheeze, Recurrent gastr oesophageal reflux,inhaled foreign body, Bronchomalacia

There are 2 kids in the family. They have a itchy rash. Mom also has itch now and then. History and D. D

- Scabies
- Tenia corpora
- Impetigo
- Eczema

Mrs Smith's son Tommy is 14 months. He is due for MMR. Counsel her.

- Do you wish to talk about it?
- What are her concerns? Inquire. Provide information leaflets
- Side effects : Mild Temp – Paracetamol, Local reaction, Faint measles like rash Extremely rare – Frank post vaccine infection
- Alternatives - ? Single vaccines. Say NO
- Autism / Inflamatory bowel disorder

Mother of 2yrs child on phone saying that David had mild reaction following peanut butter ingestion.

- What is reaction? How bad it is? Any Past history, so what was done
  - Change in voice - 999
- Piriton(Chlorpheneramine), Epipen-Adrenalin injection
- Come immediately / Ambulance

Anaphylaxis

- Abdominal cramps
- Itchiness of palms and soles, tingling
- Feeling of generalised warmth and generalised flushing of the skin
- Chest discomfort and changes in heart rate
- Unusual taste in the mouth
- Dizziness, collapse and unconsciousness
- Difficulty breathing, swallowing or speaking,hoarse voice
- Hives anywhere on the body, especially large hives
- Nausea and vomiting
- Severe asthma
- Sudden feeling of weakness
- Swelling of face, throat and mouth, choking or coughing

Thomas is 3½ yrs had fit. He had fever that afternoon. All test are normal along with neurological examination. Consultant's diagnosis is febrile convulsions. Talk to mother.

Febrile convulsions

- Benign, no need to treat regularly. No neurosepsis
- 3/100 , 6 mo to 5 yrs
- Temperature control
- Recovery position
- Anticipatory diazepam & antipyretics? NO
- No effect on intellect.
- Not epilepsy

Jack 10 months is brought to A & E by mother who thinks has swallowed 5 p coin.

–What history?

Things around, Presentation, current clinical state

–What examination and tests

Symptoms & signs related to airway, respiratory Or GIT.

–Management

Treatment plan-depends on nature of the object.

If unsure always admit, seniorassessment, neck XR CXR/AXR. Other specialty involvement

No laxatives if in GIT.

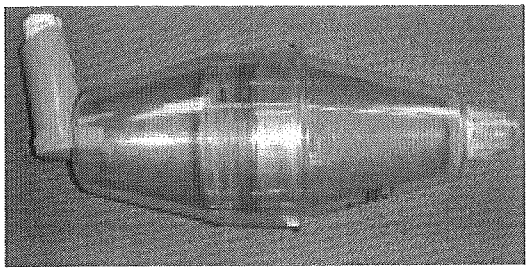
Callum's mum is anxious that he is still not standing or walking. He is 18 months.

- *History*

?? Worries since when. Has she compared? Birth history, family history.Any associated disability.

- Red Book
- Emphasise that there is age range. Any concerns from HV or GP?
- Referral to Paediatrician.

Spacer



Spacers

You are asked by A&E to see a child 6 yrs per vaginal bleeding. They have noted some bruising on the inner side of the legs

- Having examined your immpression is non accidental injuries.
- How will you proceed? What will you tell parents?

NAI

- Do not give diagnosis yourself,but be open to tell you are requesting senior help.
- At risk register, GP, HV ? Sodal services
- Substance abuse
- Other siblings
- Suspected sexual abuse - Do not attempt to examine
- If parents are aggressive or trying to get away alone or with child the Police, Duty social worker

You see a 1½yr child with nonblanching rash with high temprature,letahrgic.Counsel parents.

- Aetiology
- Signs and symptoms,Travel, Jabs
- DD & Investigations
- Will you do LP?
- Treatment
- LP in various conditions
- Explain the illness to parents
- Will my other child get it? Rx of contacts

You are called on phone by Mrs Runns, who's daughter is having diarrhoea and vomiting.Talk to her & discuss the management plan.

- Age

? Oral intake

- Type of stool, Temp
- Abdo. distention
- Tears, urine output- wet nappies(younger children)
- Skin
- Oral rehydration
- Not sure - see the child (Phone conversation)

James is 5 yrs presented with a limp. All his blood tests and x rays, seen by consultant are normal. He says it is irritable hip.
He and registrar are operating, hence want you to talk to the parents.

- *Take brief history. R/O Family H/O chronic arthritis.*
- *Review results yourself*
- *Pain releif*

Irritable hip

- *Rest for few weeks*
- *If symptoms persist or worsen after a week or so needs review.*
- *No residual damage.*

All The Best

Non Accidental Injury

- **Multiple stories,multiple bruises,injuries at different times.Detailed history and bodygrams, Growth development**
- **Delayed presentation**
- **History findings not correlating**
- **How,When,Who else.**
- **Time, contemperaneous notes**
- **Immediate medical attention + social emergency. Senior most available help**

PLAB *Right*

Surgery

Naidu

RULES

1. Think before you answer
2. Read questions fully and correctly
3. Concentrate on details
4. Answer clearly and confidently
5. Forget your previous station

Topics

- Introduction
- History taking
- Pre-op
- Consenting
- Counseling
- Post-op
- Others

Introduction

- Answer to the question ONLY! –
- Talk slowly and clearly to patients – its diff for them to understand, as much as it is for you.
- Good eye contact, mannerism and body language essential.
- Do not stand when your patient is sat down.
- Examine at body level and never inflict pain to satisfy the examiner.
- Be very polite even to aggressive patients.
- Never hesitate to say please, sorry and thanks you.

Surgical history

- Name and Age of patient- very important.
- Presenting complaint: patients own words
- History of Presenting complaints: onset, duration etc.
- Past medical history: MI, DM etc
- Past surgical history: laparoscopy, endoscopy etc
- Family history: malignancy, death
- Drug history: steroids, NSAIDS

Method of approach

1. Decide which system?
2. Possible differentials
3. General approach
4. Specific questions

Acute abdomen

- Patient is comfortably sat or lying
- Reassure - not hurt him.
- Let the patient tell you first his/her complaints
- Ask detailed questions depending on the complaint
- Ask in detail about pain
- PMH, FH, Operative and drug history
- *You don't have to tell the examiner why you are asking each question*

Scenario

A 35 yrs old secretary has been having pain in her left iliac fossa. Take history and discuss differential diagnosis with examiner

Key Points

- Age
- Onset
- Site, duration, nature
- Aggravating/relieving
- N/Vomiting/Constipation
- PR/PV bleed/ urine
- Women – LMP
- Time of last meal

Examination

- Vitals (HR, BP, RR, T, GCS)
- Observation/Inspection - distension, scars, colour, bruising, stigmata, visible peristalsis, dehydration
- Palpation - soft/rigid, tenderness, guarding, rebound, organomegaly, mass
- Percussion - bladder size, ascites
- Auscultation - bowel sounds
- Hernial orifices
- Genital and PR +/- PV exams

Investigations

- Blood tests
- Group and Save or crossmatch
- Pregnancy test
- Blood cultures
- Urinalysis
- USG
- Radiology - AXR (supine), CXR (erect), IVP, CT?
- Consider ECG>40yrs
- Peritoneal lavage in trauma

Acute Abdomen – must know

1. Appendicitis
2. Cholecystitis
3. Diverticulitis
4. Small / large bowel obstruction
5. Ca colon and operations
6. Acute pancreatitis

Scenario

A 39 yrs old teacher has cometo see you. He has been having some bleeding from his back passage. He tells you that his father died of bowel cancer. Take history.

PR Bleeding

- Young man - possible hemorrhoids
- Older man - Possible cancer
- Mucus and loose stools - Crohn's / U.C / Infective
- Young women with absorption problems – coeliac disease.

Key points

- Onset, duration
- fresh / altered blood
- Quantity – spots, streaks, splash
- Pain, mucus associated
- Diarrhoea, fever, night sweats
- Loss of wt, appetite, recent bowel changes
- PMH – anti-coagulants, NSAIDs
- Personal – family history

Scenario

55 yrs old painter has haematuria and has come to see you as his GP. Take a history discuss the management plan with the patient.

Haematuria

1. Young patient
   painful - ureteric colic
   painless - malignancy
2. Elderly - malignancy
3. Flank / Abd pain - renal causes
4. Freq, Dysuria, Urgency, Straining – lower tract.
5. Associated fever - infection.

Key points

- Onset, duration,frequency
- Painful / painless
- Blood in the beginning / middle or end, clots
- Difficulty in passing urine
- Passed any grits, white material
- Fever,, burning sensation
- Weight loss, night sweats
- PHM
- Drugs
- FH – Polycystic kidneys

Investigation

- Bloods
- X ray
- MSU
- IVU
- Cystoscopy

Talk to patient

1. Stone management
2. Investigation for malignancy

Pre-operative assessment clinics

- Run usually by nurse specialists
- Clerked in my SHO or HO or Nurse Specialist
- Anaesthetist – Consultant / SpR / SHO
- All pre-op investigations
- Sometimes consenting procedure is also done here.

Pre-op assessment

1. Presenting complaints
2. Past medical history
3. Fitness for surgery
4. Inform the anaesthetist if concerned
5. Routine investigations
6. Specific preparation for surgery
7. Drug charts
8. DVT prophylaxis
9. Book post-op investigations and physiotherapy
10. Hand-over any pending investigations

Format for consent

1. Name of operation and indication
2. Anaesthesia and risks
3. Procedure details
4. Postoperative place: HDU / ITU /same bed on ward.
5. Possibility of having central line / NG tube, catheter etc
6. Pain relief – various options
7. Duration of stay in hospital
8. Duration of convalescence
9. Benefits of operation
10. Risk a) common risk b) Serious risks
11. Alternatives

Don't forget to get the consent

Summary

1. Know the operation and indication
2. Anaesthesia and risks
3. Pre-operative preparation
4. Procedure details
5. Risks and complication management
6. Post-op period and discharge

Scenario

Consent this 16 year old girl who is admitted to the ward for an appendicectomy.

Scenario

42 year old lady who has been admitted to the hospital for a laparoscopic cholecystectomy tomorrow. Talk to her

Order of explaining

- Laparoscopy – key hole surgery
- Anaesthesia and risk
- Pre-operative preparation
- Procedure – camera, 3 small openings, may have to convert!
- Risks of procedure – bloated, sick, ileus, damage to bowel, leak of bile, infection.
- Post-op – home in 1-2 days

TURP consent

- Enlargement of gland – hyperplasia
- Small tube called cystoscope will be passed
- View the inside of the water passage and remove the prostate
- Avoid driving for 2 weeks
- Post-op – pain relief, catheter 1-2 days, amt ejaculation reduced, blood urine 2-3 wk, inc freq,
- Home in 2-3 days
- May recur but less likely to transform to cancer
- Complication: infection, bleeding, difficulty

Scenario

A 68 year old lawyer called Mr Yates is having a TURP for a benign prostate. Consent him for the procedure. He has just got himself a new relationship with a younger women.

Telephone Conversation

Scenario

You have seen a patient in casualty and not able to get in touch with your registrar as he's in theater. So you want to discuss a case with your consultant Mr Mike

38 year-old man, with severe central colicky pain since 12 hours, nausea, vomiting, with an irregular lump in the right groin, guarding and rigidity.

Discuss findings, investigation results, X-ray, your probably diagnosis, what you have done till now and your management.

- Introduce and reason for ringing.
- Start with History, relevant past history, relevant social history, examination findings, relevant results.
- Mention your initiation of treatment
- Diagnosis and why
- Confirmation
- If he disagrees don't argue
- Thank him for his time!!

Scenario

Margaret is a 72 yrs old spinster. She has been left at the A&E department by her relatives. She doesn't look well and has this lump on her abdomen. Ring your registrar up and ask him to come and review the patient. Tell him what you think is going on and how you will manage. There is an X ray taken which shows dilated small loops of small bowel and her observation charts suggest dehydration.

Acute intestinal obstruction

- Acute large bowel obstruction and is not very well.
- Confirmed your diagnosis – Xray / USG
- Diagnosis and management plan.
- Nil by mouth, IV fluids and resuscitation
- Bloods for FBC, U&E, Amylase, LFT, Clotting and G&S
- Other necessary investigation– CXR, ECG as appropriate
- NG tube if vomiting and catheter if patient going to theatre
- Pain relief and anti-emetic

Scenario

You are on the **surgical SHO on call** attending to a trauma call in A&E. A 58 year old man had a laparotomy for carcinoma colon with resection of bowel and end colostomy done. He is tachycardic (HR 116) 8 hours after surgery and the nurses have started a bag of colloid (500ml) fluid challenge on advice of house officer. 2 hours later he is still tachcardic and now nurses say he is slightly cool in his periphery. His BP is 120/80 and he is afebrile. You are asked by nurse to review.

Ring your consultant, his name is Mr. King and discuss

Management

- Immediate management
- Make a full assessment – mention review of notes, charts, blood and examine
- Investigate him with a suspicion of haemorrhage or perforation
- Arrange appropriate investigation: bloods, Xray, USG etc
- Inform senior of all your assessment in the same order – on call person may not know this patient.
- Tell him your impression and what you are going to do.
- Theatre!!!
- If you are not sure of what is happening let him know that!!!

Post operative ward round scenario:

1. Look at Patient:
2. Examine patient:
3. Check charts:
4. Review: nutrition, pain relief, antibiotics, drugs cards
5. Communicate:

Scenario

25 year old comes to hospital with a lump in his left testis. You have examined him and you feel that it is a testicular tumour. Explain the management and answer his queries.

Testicular tumour

- Commonest malignancy in men.
- Occur in younger age group
- May not be painful
- May be recognized after a trauma
- Spread to lymphatics and later to lungs
- Has good prognosis if treated early - 5yr survival >70%

Counseling

- Explain possibility of tumour
- Further special tests for confirm
- USG scan first or a CT scan may be required
- Can it be cancer? – Yes possibility
- Confirm - tests
- Worried about fertility??
- Complete treatment??
- Biopsy??

Hemicolectomy and counseling for colostomy and anastamosis

- Explain diagnosis.
- Will need bowel preparation
- Colostomy may be temporary
- May be catherised after surgery
- Complications are anastomotic leak, needing repair, bowel damage, Ileus, infection and haemorrhage.

Colostomy

- Definition: Opening of the bowel on to the tummy
- Usually temporary and may need another surgery to rejoin the ends later to give natural bowel opening.
- Bag will be changed every day one or more time, more initially.
- Itching and irritable around stoma
- Nurse specialist will explain more in detail before procedure
- Complications in management at home will be explained, like blockage, pain, and small lump by its side etc.

Scenario

Mr Blackwell has been having some black stools and today he has vomited some blood. You confirm that he drinks too much and would like to do an emergency endoscope. Consent him for the procedure.

Patient Information

- Endoscopy
- Colonoscopy
- Vasectomy

PCA

- Superior to IM / IV
- Small doses of Morphine 50mg /50ml
  4 hr limit=30mg.
- Special microprocessor controlled pump
- Loading dose first
- Triggered by patient's hand - pre-set amount
- Cannot overdose.

MRSA - Superbug

- Bacterium prevalent in community & hospital
- Seen in 30% of healthy population in nose & skin
- Causes localised, superficial abscesses when skin is disrupted
- Cause 50% of nosocomial infections
- Vancomycin & Rifampicin are now used to treat MRSA
- In vulnerable patients it causes- wound infections, pneumonia,UTI, osteomyelitis, endocarditis & septicaemia

What do we do?

- Majority of carriers will not be susceptible
- Barrier nursing, hand washing, gbves, aprons
- Patients shold be isolated & room claned after they leave
- Judicial use of broad-spectrum antibiotics
- Colonised patients shuld be treated with mupirocin to skin & nose
- Was hair & body with disinfectants
- Very important to involve & folow microbiologist's advice
- Provided everyone at home is healthy special precautions are not required at home.

- The most important type of isolation required for MRSA is what is called **Contact Isolation.**
- Role of Infection control nurse
- Staff should wear disposable gloves when they have physical contact with open wounds, for example when changing dressings, handling needles or inserting an intravenous drip.
- If you are concerned about hygiene, don't be afraid to ask the doctor or nurse treating you, or your visitors, if they have washed their hands.

Thank you

Good Luck

Hypothermia

Mr Rogerson is 78 year old man suffering from dementia. He was admitted this morning for increased confusion. He was found to have hypothermia. All investigation was normal. Talk to his daughter Lisa Brennon and advise on discharge plan.

This is a scenario of discharge planning.
You are expected to find out the cause of hypothermia and suggest a suitable management plan to prevent such episodes in future.

Introduce your self and explain the reason for the visit.

Open question to explore the cause for hypothermia

Environmental
Drop in house temperature (lack of heating, broken door or window)
Wondering

Personal
Not wearing warm cloths
Alcohol consumption

Medical:
Loss of weight
Not eating
Medication (sedatives)

Care arrangements
Assess his ability to carry out daily activities of living. This includes the following

1. Can he cook, clean, wash himself, dress himself, use toilet and shower/ bath.
2. Can he walk independently
3. Can he manage his finances and do his own shopping
4. What support does he receive from family members and carers
5. How are his carers coping?

Explore the cause of hypothermia in details to make appropriate plans for prevention
If hypothermia is caused due to heating problems at home, you need to explore why heating is not working. If it is due to financial problems, then have assess and explore the financial problems. Elderly patients can be vulnerable for financial exploitation. If they have problems in managing money, family member can be appointed to manage their financial affairs.

Management: To involve social worker and occupational therapist for further assessment.

Needle Stick Injury:

Scenario 1.
Miss Scott, 32 year old nurse in a psychiatry ward, has sustained needle stick injury and has now come to A & E. Take history and discuss the management

Scenario 2.
Mother has brought a child to A & E due to needle stick injury in the park.

Introduce yourself
Explain the purpose of the visit and task
Ask an open question to explore the circumstances and details of the incident.

This is an assessment of untoward incident that has medical implication
Circumstances that lead to the incident: Can you please tell me how it happened?
Details of the incident: When? Where did you get hurt (site), how deep was the wound, amount of bleeding, did you make it bleed?
Details of the needle: what type of needle was there blood in it? When was that needle used and for what? Get the details of the subject on whom this needle was used.
After the incident: How long did the wound bleed, did you wash the hand? Did you report the injury?

Medical History: Any current health problem and current medications

Vaccination History: Hepatitis B vaccination

Past History: Previous needle stick injury, liver disease, any previous health problems

Personal history: Relationship

Explore Concerns:

Management:
Blood test for HIV, Hepatitis B and C: Now, in 3 months and 6 months time.
If high risk, advise post exposure prophylaxis with in hour of injury

What are the chances of getting the disease when the contact is positive?
Chances of getting HIV is 0.3% very low
Chance of getting Hepatitis B are 30% if not vaccinated. (All health care professionals are vaccinated)
Hepatitis C: There is 10% chance, no vaccination.

Advise on safe sex and to avoid blood donation in the interim period.

PAIN MANAGEMENT

1. Laura Smith has been diagnosed with non Hodkins lymphoma. She is worried about pain. Talk to her.
2. Karen Jones has been prescribed Morphine recently. She has some few concerns. Talk to her.
3. Mr Jones suffering from Prostrate cancer with bone metastasis. He has been deemed MEDICALLY fit for discharge by your consultant. He is currently cocodomol for pain. Talk to his daughter about further management and home care.
4. Mrs Smith has been taking codeine. She has breast cancer. Mrs Smith is complaining of constipation and pain. Talk to her.
5. Mr Jackson is 34 year old he has been posted for Hernioraphy procedure. He is concerned about pain management

Introduction.

Peak Flow Meter

Mr Smith is 34 year old suffering with asthma. Explain the use of peak flow meter and how to record the readings.

Introduction

Check patients understanding of PEFR if he is already using, any problems he is facing.

When to use PEFR

They should be checking their PEFR regularly, particularly if their asthma is worse than usual.

Steps of Checking PEFR.

Connect a clean mouthpiece and ensure the marker is set to zero.

Stand up or sit upright and Take as deep a breath in as you can and hold it.

Place the mouthpiece in your mouth and form as tight a seal as possible around it with your lips. Breathe out as hard as you can.

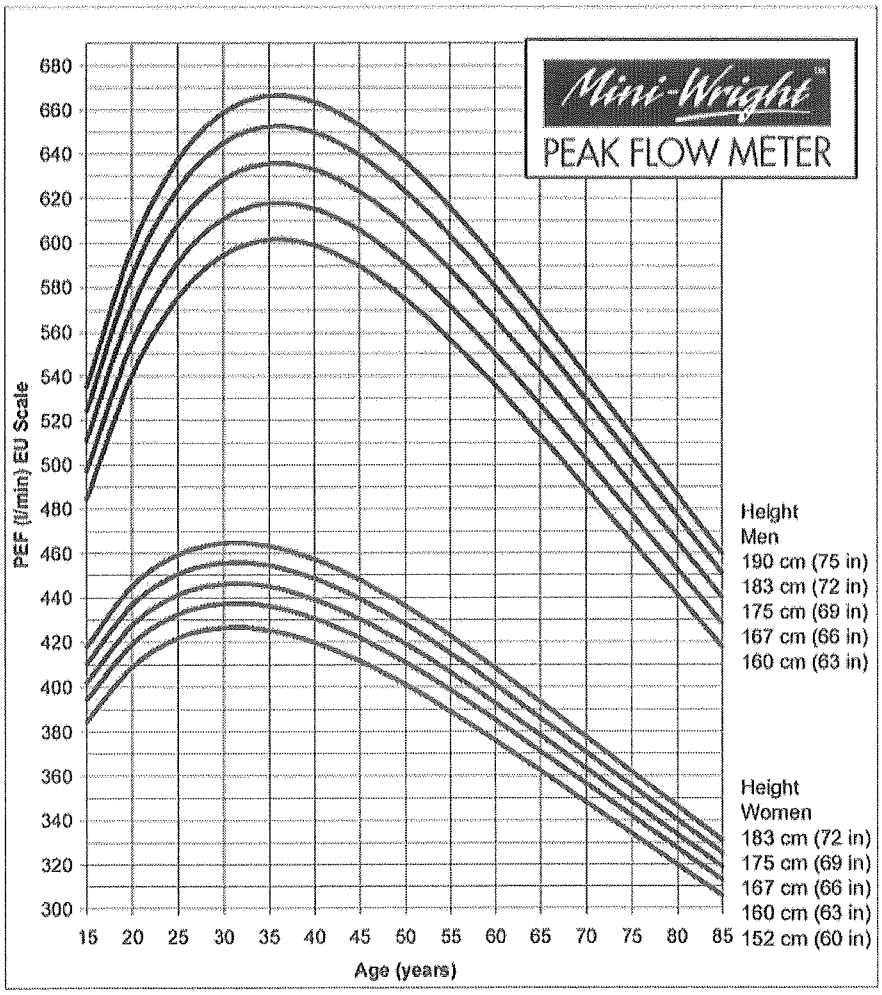
Observe and record the reading.

Repeat the process 3 times and record the highest reading.

Record the reading on the chart.

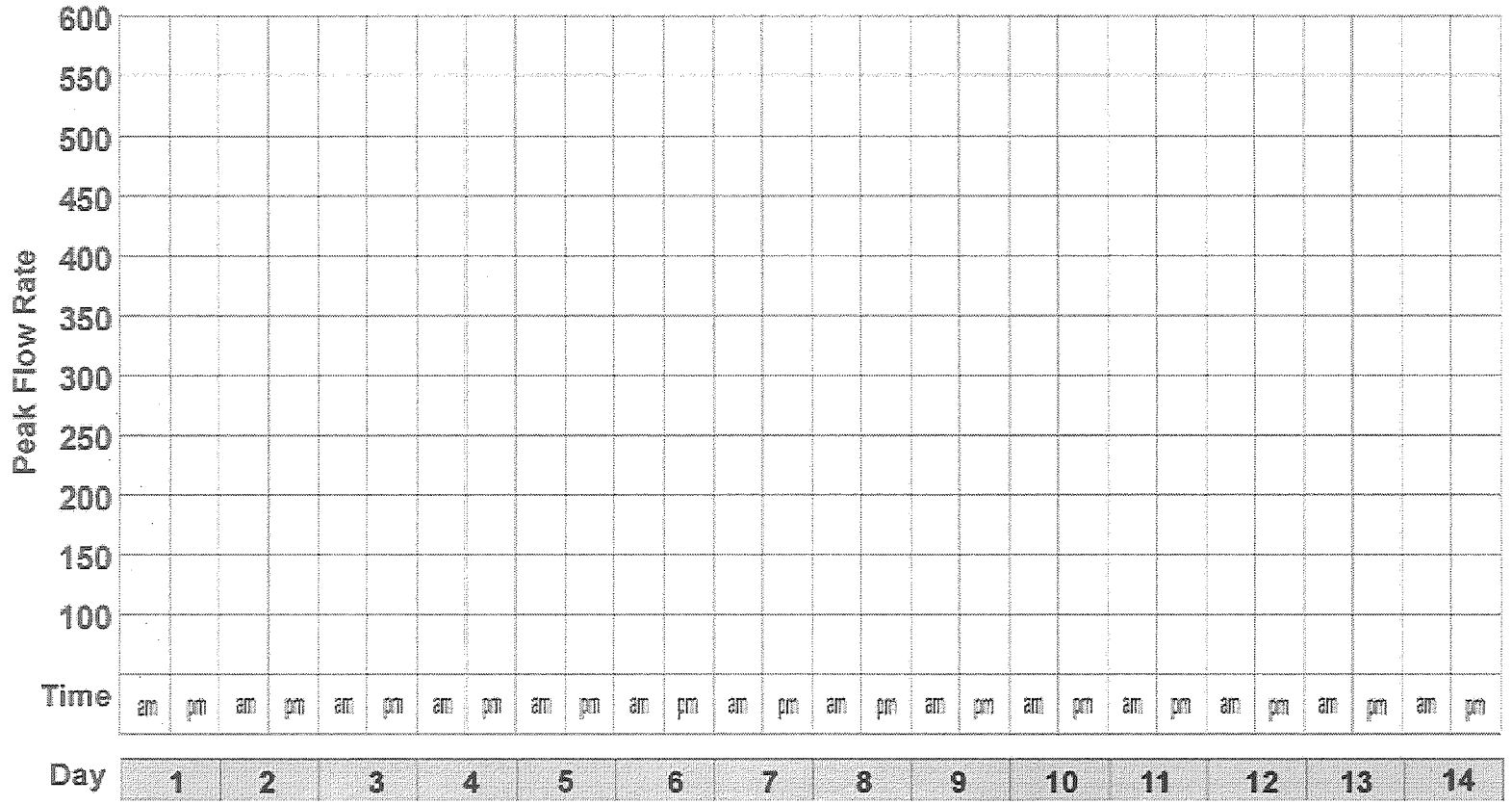
PEAK EXPIRATORY FLOW RATE - NORMAL VALUES

For use with EU/EN13826 scale PEF meters only



Adapted by Clement Clarke for use with EN13826 / EU scale peak flow meters
from Nunn AJ Gregg I, Br Med J 1989:298;1068-70

Name ..... Date .....


Peak Flow Rate
600
550
500
450
400
350
300
250
200
150
100
Time
am pm am pm am pm am pm am pm am pm am pm am pm am pm am pm am pm am pm am pm am pm am pm
Day
1 2 3 4 5 6 7 8 9 10 11 12 13 14

Smoking Cessation:

Assessment/ Suitability

Details of smoking pattern
Duration of smoking
Severity: Number of Cigarettes per day
Previous attempts to stop smoking and the reason for relapse.
Enquire about previous use of nicotine replacement therapy or other medications to aid smoking cessation.
Target end date (set up a date with the patient when they will stop smoking)

Please note Target end date is specific to cigarette smoking, DO NOT establish this in other form of addiction like opiate or alcohol addiction.

Current physical health problems
Specifically ask about
Cardiac problems
Epilepsy
Depression, if yes then ask about self harm
Skin conditions.
Renal and Liver problems

Past medical history
Medication history including side effects and allergies

Treatment / Advice

Check patient's awareness and knowledge about treatment:

There are mainly 2 type of treatment
Nicotine Replace Therapy and Tablet that reduces craving for smoking.

Based on patient choice and contraindications, decide on the most suitable treatment.

NRT is preferred in patients suffering from depression, epilepsy, cirrhosis, brain tumor, eating disorder pregnant, breast feeding and any one under the age of 18

Tablets that reduce craving is preferred over NRT for patients having cardiac problems, palpitations and sleep disturbance.

Only explain the treatment that you are going to offer in detail

How do they work?
Nicotine replacement therapy works by releasing nicotine steadily into your bloodstream at much lower levels than in a cigarette, without the tar, carbon monoxide and other poisonous chemicals present in tobacco smoke. This helps control your cravings for a cigarette that happen when your body starts to miss the nicotine from smoking.

Tablets help by reducing craving for smoking.

NRT
Common forms of NRT are

- skin patches (commonly used)
- chewing gum
- inhalators, which look like plastic cigarettes
- tablets and lozenges, which you put under your tongue
- nasal spray
- mouth spray

Side effects of NRT include:

- skin irritation when using patches
- irritation of nose, throat or eyes when using a nasal spray
- disturbed sleep, sometimes with vivid dreams
- upset stomach
- dizziness
- headaches

Stop smoking medication

Two medications are available on the NHS to help you stop smoking.

DO NOT CHOOSE ONE OVER THE OTHER, BOTH ARE SAME.

Zyban (bupropion)

Champix (varenicline)

These tablets should be taken 7-14 days before the target end date. A course of treatment usually lasts seven to nine weeks. Initial prescription is for 2 weeks.

Side effects

- dry mouth
- upset stomach
- insomnia (trouble sleeping)
- headaches
- difficulty concentrating
- dizziness
- drowsiness
- Low mood and reports of suicidal thoughts.

Electronic Cigarets are not available on NHS

TALKING MANIKIN STATIONS:

Most of the talking manikin stations are framed as emergency situations. You are basically being tested in your ability to deal effectively with emergency situations. You shall also find a monitor with the patient's vitals and ECG trace being displayed.

1. ACUTE EXACERBATION OF ASTHMA

A 30 year old man has presented to the ED with acute shortness of breath of half an hour duration. Take a focused history, examine and discuss your findings and plan of management with the examiner.

- When you'll enter the room, you'll find the patient (manikin, that is) in distress. He shall be gasping for breath. Take a focused history, which should include:

Onset, Duration and Progression of SOB (Patient may have history of asthma)

You may need to give patient 100% oxygen via non-breathable bag if the patient is in distress. Three types of masks are placed with labels: 24% oxygen, 28% oxygen and 100% oxygen. You shall be able to see the patient's oxygen saturation rise on the monitor after administration of oxygen, and the patient's condition improving. After that, proceed to ask further questions:

Cough? Fever? Chest pain? Compliance with inhalers? Any known illnesses? Medications?

Note: The history should be focused and only the most important relevant questions should be asked.

- It is very important to tell the examiner what you see on the monitors.
- Proceed to examine the patient's chest. You shall be able to hear bilateral wheeze all over the chest on auscultation.

Note: Place the stethoscope in the mid-clavicular line as this is where speakers are placed inside the manikin. You shall be able to hear clearly there.

- The examiner shall ask you about your most probable impression/diagnosis about the patient's condition, and the further management as well.

Further management of acute exacerbation of asthma:

- Nebulisation with 5mg salbutamol
- Nebulisation with 0.5mg ipratropium bromide
- 100mg hydrocortisone intravenous
- Bloods for ABGs, FBC and other baseline investigations
- Chest X-ray
- Inform seniors as well

2. ACUTE LIMB ISCHAEMIA

A 55 year old man has presented to the ED with acute onset of severe pain in the right leg. He is a diabetic and is taking metformin for it. Take a focused history, examine and discuss the further management with the examiner.

- Take a focused history.
  Onset, duration and progression of presenting complaint
  Character of pain
  Exacerbating and relieving factors
  Severity of pain
  Recent surgery? Recently bed-bound?
  Any other illness?
  Diabetic control?

- Proceed to examination of legs.
  On inspection, you shall be able to notice that the affected leg is pale. Look for gangrenous patches as well.
  Palpate for temperature difference in both legs. Palpate the disal pulses. The dorsalis pedis pulse shall be absent in the affected leg.

  Note: Acutely ischaemic limb – pale, pulseless, painful, perishingly cold, paresthetic

- You shall also be able to see atrial fibrillation ECG trace on the monitor. Tell the examiner what you see on the monitor. Palpate the radial pulse as well.

- Based on these findings, your most probable diagnosis should be acute limb ischemia due to thromboembolism as a result of AF. It is important to tell the examiner about your impression.

- Management:
  - Inform seniors and early referral to Vascular Surgery Department.
  - Painkillers
  - Duplex scan of the affected leg
  - Ankle-Brachial Pressure Index of the affected leg
  - Draw bloods for baseline investigations, especially blood clotting profile.

3. CVS Examination

I. An 80 year old man has presented to you with intermittent episodes of dizziness and black-outs. Conduct a CVS exam and look for signs of heart failure. Also check patient's blood pressure. Discuss your findings with the examiner and tell him about your probable diagnosis

II. An 80 year old man has presented to you SOB. Conduct a CVS exam and look for signs of heart failure. Discuss your findings with the examiner and tell him about your probable diagnosis.

This is simply a CVS exam and not a simulated emergency. Therefore, go about the CVS exam – starting with inspection, palpation and auscultation. Auscultation is the most important step of the this exam, therefore, the major chunk of the time should be allocated to it.

A monitor is also present which shows the patient's vitals and ECG trace. A blood pressure cuff is also attached to the patient's arm and the candidate expected to measure the BP by palpatory method.

- Inspection (not necessary)
- Palpation – check radial pulse, note rate, rhythm, volume (very important, not to be skipped – you may feel an irregularly irregular pulse consistent with AF). Please look at the monitor as well and compare your findings. Also look for a parasternal heave.
- Ausculation – carry out a detailed auscultation of all areas (very important). Two types of murmurs are usually framed:

  Murmur of aortic stenosis – Ejection systolic murmur best heard in A1 and A2 areas, and radiating to the neck. You should be able to listen to such a murmur in scenario I (people with aortic stenosis usually present with episodes of black-outs or dizziness)

  Murmur of mitral regurgitation – Pan systolic murmur best heart at the apex, and radiating to axilla. You should be able to listen to such a murmur in scenario II. Other findings will be an irregularly irregular pulse. And an ECG trace on the monitor consistent with AF.

- Ausculation of lung bases for basal crepitations (very important sign of heart failure, should not be missed)
- Also verbalise to the examiner, that you'll also look for a raised JVP and ankle oedema (these signs are not present in a manikin, but nevertheless should be verbalized to the examiner)
- Tell the examiner your diagnosis.

4. A 50 year old man presents to you with chest pain and shortness of breath. Take a focused history, examiner the patient's chest and tell the examiner your differential diagnosis.

- Ask questions of SOCRATES for chest pain. Ask onset, duration, progression and aggravating and relieving factors of SOB. (very important)
- Ask about cough and fever. (very important)
- Ask about any long-term illness. Medications.
- Smoking history (very important)

Note: Only ask the most relevant questions which will help you reach a differential diagnosis.

- Examine the patient's chest – inspection, palpation and percussion should be cursory. Spend more time on auscultation. You may be able to listen to crackles.
- Usual differential diagnosis: Pneumonia, COPD, MI.

5. Septic Shock

An 80 year old female has presented to you by her daughter, with altered level of consciousness and fever. She lives in a nursing home. Take a focused history from the daughter, examine the patient and discuss your diagnosis and further management with the examiner.

- Take a focused history. Check onset, duration and progression of fever and altered consciousness. Ask about headache, vomiting, SOB, cough, waterworks? Bowels? Bed sores?
- Examine the patient.

    - Check airway.
    - Check breathing (check the monitor for oxygen saturation and put on oxygen mask if required)
    - Check circulation (usually the patient is hypotensive, tachycardic and running a temperature as well. All of this is evident from the monitor). Verbalise to examiner that you will raise the foot-end and pass two large bore IV cannulae and give patient fluids according to trust guidelines.
    - Look for focus of infection (usually the patient seems to have UTI, there is a lodged urinary catheter as well)
    - Discuss your impression/provisional diagnosis with examiner.

    Further management:

    - Send baseline investigations – FBC, CRP, U&Cr, LFTs, blood clotting profile, blood cultures, urine culture
    - Inform seniors and ITU
    - Give empirical antibiotics

WHIP LASH INJURY

A man comes to you with complaint of neck pain. Take a brief focussed history and do the relevant examination.

Brief Focussed History
Greetings
Introduction
Explanation of the procedure
Consent

. Can you tell me more about it?
(The patient will give history of a collision with another car yesterday and this morning his neck has starting to hurt a lot).

. When did the collision happen?
. Time of accident
. Where were you sitting at the time of collision? Driver's seat/ seat adjacent to it/ or at the back
. Was anybody else in that car besides you?
. Were you wearing seat belt at the time of collision?
. Where was the impact? From the front/ side/ or at the back
. What was the condition of the road at the time of impact? Wet/dry
. What was your car speed?
. What happened after the impact?
. Did you come out of your own from the car?
. Did you receive any medical aid at the site of impact?
. Were you taken to hospital? What did the doctors say? Any X-rays?
. What happened to the car? Was it writ off?
. How did you manage to go home?

. Then start asking about his neck pain (**SOCRATES**)
(Site, Onset, Character, Duration, Radiation, Associated symptoms, Timings, Exacerbating and relieving factors, Severity)

Inform the examiner that
'On the basis of history, it seems to be soft tissue injury, but if there is any suspicion of cervical injury, I will put cervical collar'.
The examiner replies that there is no cervical spine injury on radiograph, proceed towards your examination.

Before proceeding towards **examination of the neck**, make adequate exposure, consent has been already taken in the start.

Look
Inspection of the neck, also comment on the cervical lordosis (it will be lost)

Inform the patient that you are about to feel for his neck.

Feel
. Check temperature.
. Palpate cervical spines while looking at the patient's face.

. Palpate para-spinal muscles, while looking at the patient's face.
(There will be tenderness in both of them), do empathy

Move
Ask the patient to do few cervical spine movements (flexion/ extension/ lateral bending)
(They will be restricted)

Brief Neurological Examination of Upper limb
. Inspection
. Palpation: for any tenderness or crepitis
. Motor function: one proximal muscle/ one distal muscle
. Sensory function: Just one sensation
. Reflexes: Biceps jerk
. Co-ordination and function: if time allows

Finish the station by saying 'THANK YOU' to the patient and ask the patient to cover.
Face the examiner to say that you ill complete the examination by doing:

. Examination of the spine
. Neurological examination of the lower limbs

Emergency Endoscopy

Emergency Endoscope is done to control the upper GI bleeding. Patient might have presented to hospital with melena or hemetemesis.

Procedure is done under sedation
A camera is passed through the mouth to stomach. After identifying the cause or bleeding site appropriate steps will be taken to control the bleeding where possible. This may include procedures like thermal coagulation or clipping.

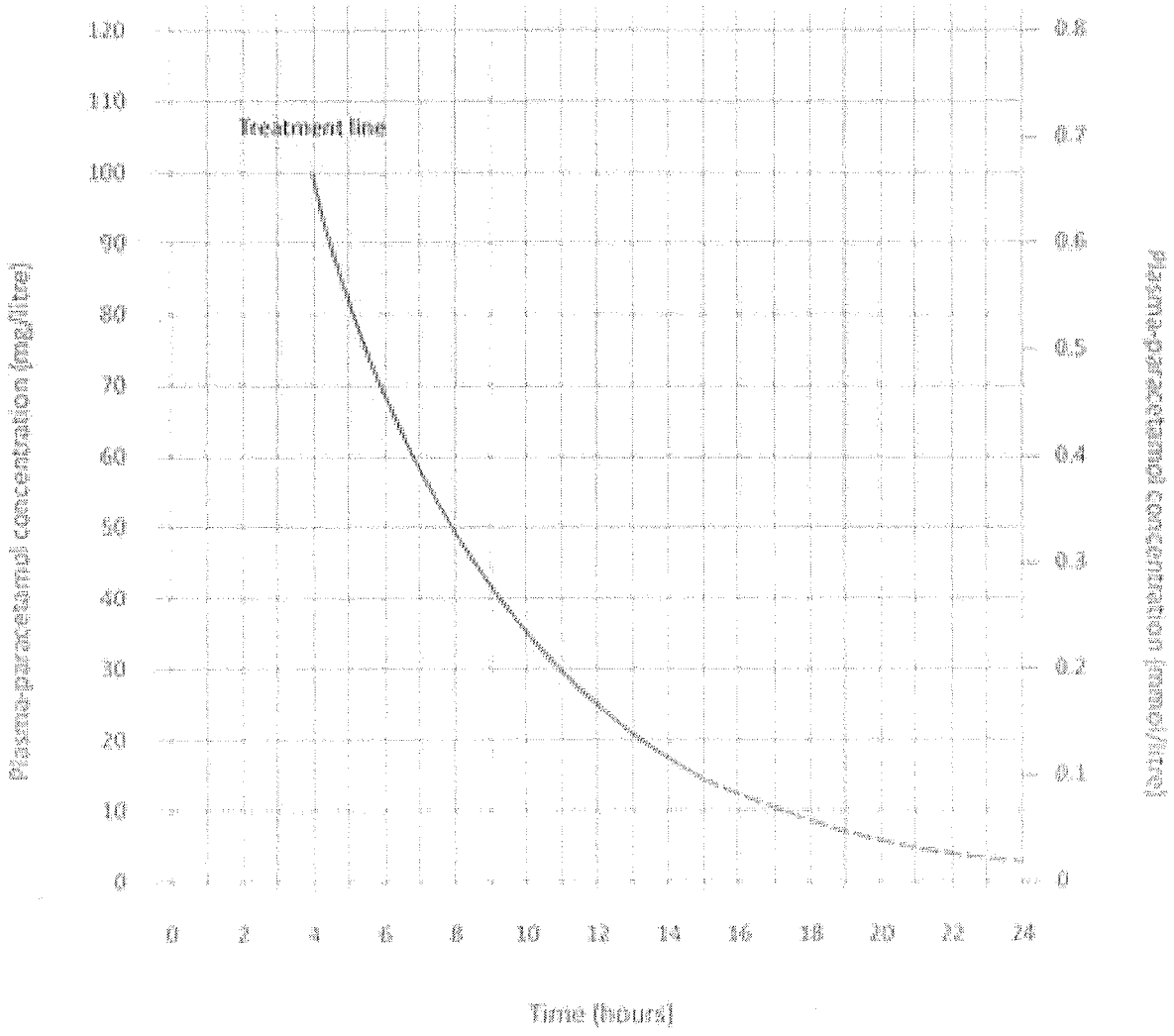
The risks of complications
Sedation can effect breating and rarely patients have allergic reaction to sedative
Some patients may develop a cough or an infection in the chest following Endoscopy.
Very rarely the gullet or the stomach may be damaged causing bleeding or
a perforation. There is a slight risk of damage to crowns or bridgework of teeth.
There are risks due to bleeding; you may need to be given blood if blood loss is significant.

You will have to stay in hospital for monitoring of bleeding after the procedure.

Meningococcal Infection Prevention:

This is a notifiable disease.

Prophylaxis (Rifampicin) To close contacts of cases, irrespective of vaccination status - for example, those who have had prolonged close contact with the case in a household-type setting during the seven days before onset of illness (ie living and/or sleeping in the same household, pupils in the same dormitory, boy/girlfriends, or university students sharing a kitchen in a hall of residence).
Those who have had transient close contact with a case and have been directly exposed to large particle droplets/secretions from the respiratory tract of a case around the time of admission to hospital.



- All patients with a timed plasma paracetamol level on or above a single treatment line joining points of 100mg/L at 4 hours and 15mg/L at 15 hours after ingestion should receive acetylcysteine (Parvolex or generics) based on a new treatment nomogram, regardless of risk factors (see Figure 1 below)
- Where there is doubt over the timing of paracetamol ingestion including when ingestion has occurred over a period of one hour or more – 'staggered overdose' – acetylcysteine should be given without delay (the nomogram should not be used).
- Administer the initial dose of acetylcysteine as an infusion over 60 minutes to minimise the risk of common dose-related adverse reactions

Important Stations: Likely to repeat frequently in the exam
For Rapid Revision Course

SIM MAN:

Chest Pain and SOB – Pneumonia
Wheeze – Asthma
Pain in leg – Acute limb ischemia
CVS Examination

Manikins

Suturing
IV cannulation
Blood Sampling
ABG
Male Catheterisation
Breast Examination
PV Examination
Eye Examination

Examination

Lymphoreticular
Alcohol / diabetic foot
CVS/Heart Failure
Comatose patient –GCS and Neurological examination
GCS and examination of patient with headache
Abdomen –Acute *Cholecystitis*
Secondary Survey – Femur #
Knee
Diplopia
Visual Field –Bitemporal hemianopia or tunnel vision
Thyroid Examination
Hip
RS
Primary and Secondary Survey
Whiplash Injury History + Examination

History
Diarrhoea
Fever
Palpitation
Headache
NI Child
Fits in child

Red eye
ECTOPIC – In acute pain
Hematuria
Wt loss
Chest Pain
Dysphagia – Hx and Management (Investigation –SALT)
SOB
Haemoptysis
PR Bleeding
Sexual History
MMSE

Anaemia
Testicular Pain
Abdominal Pain
Alcohol
OCP Suitability
Hot flushes
Fit Child –Hypoglycemia and Febrile
Hypothermia
Epilepsy –Review History

Counselling
Fuloxetine
Pea nut allergy
Colic
PRE ECLAMPSIA
Hemicolectomy Primary anastemosis
Post MI
MS
UTI BPH- Investigation results given Hx of Penicillin allergy
NAI
Pain Management
Infantile Colic
MRSA
Hernioraphy
Emergency Endoscopy
URTI – ANTIBIOTICS/ MANINGITIS
Mastectomy: Follow up
Radical Nephrectomy
Meningococcal Septicaemia Child in HDU– Talk to father
Warfarin- Unable to manage medication (Learning disability)
OC pills- Suitability
Emergency Contraception
Blood Transfusion – 4 pints

Telephone Conversation

1. Obstructed Hernia : Hx, Vitals, Xray given
2. Post op: Hemicolectomy
3. Post op: Hysterectomy – pulmonary embolism
4. NAI
5. Fever, talk to mother, Tumbler test
6. Diarrhoea, Talk to mother

Pain Management:

Breast CA, codein, partial response + Side effect Talk to daughter
Hernia- Infection
Non Hodkins Lymphoma: Pain Ladder
Chronic Pack Pain: MRI Degenerative Change (Rheumatology SHO)
Discharge Plan talk to daughter: Metastatic Prostrate CA
Morphine: Teacher is worried about drowsiness and addiction